



**SERVIZIO SANITARIO REGIONALE**  
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# **AZIENDA OSPEDALIERO-UNIVERSITARIA DI PARMA**

## **PUBBLICAZIONI SU RIVISTE CENSITE**

**OTTOBRE - DICEMBRE 2011**

**A CURA DI : UNITÀ OPERATIVA RICERCA E INNOVAZIONE**

1) Agnelli, L; Storti, P; Todoerti, K; **Sammarelli, G**; Dalla Palma, B; Bolzoni, M; Rocci, A; Piazza, F; Semenzato, G; Palumbo, A; Neri, A; **Giuliani, N** (2011) [\*Overexpression of HOXB7 and homeobox genes characterizes multiple myeloma patients lacking the major primary immunoglobulin heavy chain locus translocations\*](#) AMERICAN JOURNAL OF HEMATOLOGY 86(12):E64-E66 **IF=3.576** [Letter]

2) Amadori, D; Milandri, C; Comella, G; Saracchini, S; **Salvagni, S**; Barone, C; Bordonaro, R; Gebbia, V; Barbato, A; Serra, P; Gattuso, D; Nanni, O; Baconnet, B; Gasparini, G (2011) [\*A phase I/II trial of non-pegylated liposomal doxorubicin, docetaxel and trastuzumab as first-line treatment in HER-2-positive locally advanced or metastatic breast cancer\*](#) EUROPEAN JOURNAL OF CANCER 47(14):2091-2098 **IF=4.944** [Article]

3) Angelini, M; **Negrotti, A**; Marchesi, E; Bonavina, G; **Calzetti, S** (2011) [\*A study of the prevalence of restless legs syndrome in previously untreated Parkinson's disease patients: Absence of co-morbid association\*](#) JOURNAL OF THE NEUROLOGICAL SCIENCES 310(40940):286-288 **IF=2.167** [Article]

Objective: The co-morbidity between Parkinson's disease (PD) and restless legs syndrome (RLS) is currently controversial, mainly because in most of the studies so far conducted, the patients were already on therapy with dopamine(DA)ergic drugs. This study has been carried out to assess the prevalence of RLS in de novo PD patients previously unexposed to DAergic drugs. Methods: One hundred nine cognitively unimpaired outpatients with PD (70 M/39 F), mean age 66.89 years +/- 9.37 SD were included in the study. The mean duration of PD was 15.81 months +/- 11.24 SD, and the median Hoehn and Yahr (H&Y) stage was 2 (range 1.5-3). All patients underwent interview to assess the occurrence of overall life-time and current "primary" form of RLS according to the criteria of the International RLS Study Group (IRLSSG). One hundred sixteen age and sex matched subjects (74 M/42 F, mean age 66.52, years +/- 8.65 SD) free from a history of neurological diseases, were taken as controls and likewise interviewed. "Secondary" forms of RLS in both patients and controls were subsequently excluded. Results: No significant difference was found (chi-square test) in the frequency of overall life-time and of current "primary" RLS between PD patients and controls (6 out of 109 versus 5 out of 116 and 3 out of 109 versus 3 out of 116, respectively). Conclusions: This survey does not support the concept of a co-morbid association between the two conditions and confirm indirectly the findings of previous studies reporting the onset of RLS after diagnosis of PD has been made in the great majority of patients and so likely on ongoing DAergic treatment. Therefore, we speculate that RLS occurring in these patients could be related to DAergic therapy for PD. (C) 2011 Elsevier B.V. All rights reserved.

4) Ardigo, LP; **Lippi, G**; Salvagno, GL; Schena, F (2011) [\*Physiological Adaptation of a Mature Adult Walking the Alps\*](#) WILDERNESS & ENVIRONMENTAL MEDICINE 22(3):236-241 **IF=0.558** [Article]

Research on endurance locomotion has mainly focused on elite athletes rather than common middle-aged subjects. Our report describes the physiological and hematological adaptation of a healthy, active 62-year-old man who trekked alone along a 1300 km/3 month course of Alpine paths (Via Alpina). The following procedures were conducted: pre- and post-trekking and fortnightly field anthropometry (total and lean body mass), functional tests (isometric maximal voluntary force, spontaneous walking speed, relative metabolic cost, and peak oxygen consumption) and clinical chemistry/hematological measurements with laboratory instruments; daily self-administered effort measurements using portable devices along the route (walked distance, ascent, descent, time, metabolic consumption, and cost). Despite the

tough trekking route, the subject completed the trek without any worsening of his performance, or any significant health or functional problems. In addition, his peak oxygen consumption increased by 13.2%. His successful adaptation may be attributed to his constant, repeated middle-intensity and extensive exercise and lengthy exposure to high altitude. The clinical chemistry/hematological measurements documented his physiological adaptation. In conclusion, we show how an active, middle-aged man can successfully face endurance trekking, not only without any harm to his health or functions but also with an increase in his capacity to support specific effort.

5) Barboni, P; Savini, G; Parisi, V; Carbonelli, M; La Morgia, C; Maresca, A; Sadun, F; De Negri, AM; **Carta, A**; Sadun, AA; Carelli, V (2011) [\*Retinal Nerve Fiber Layer Thickness in Dominant Optic Atrophy Measurements by Optical Coherence Tomography and Correlation with Age\*](#) OPHTHALMOLOGY 118(10):2076-2080 **IF=5.017** [Article]

6) Baroncelli, S; Tamburrini, E; Ravizza, M; Pinnetti, C; Dalzero, S; Scata, M; Crepaldi, A; Liuzzi, G; **Molinari, A**; Vimercati, A; Maccabruni, A; Francisci, D; Rubino, E; Floridia, M (2011) [\*Pregnancy Outcomes in Women with Advanced HIV Infection in Italy\*](#) AIDS PATIENT CARE AND STDS 25(11):639-645 **IF=2.333** [Article]

7) Berardi, A; Lugli, L; Rossi, C; China, M; Chiossi, C; **Gambini, L**; Guidi, B; Pedna, MF; Piepoli, M; Simoni, A; Ferrari, F (2011) [\*Intrapartum antibiotic prophylaxis failure and group-B streptococcus early-onset disease\*](#) JOURNAL OF MATERNAL-FETAL & NEONATAL MEDICINE 24(10):1221-1224 **IF=2.071** [Article]

8) Bertolini, L; **Vaglio, A**; **Bignardi, L**; **Buzio, C**; **De Filippo, M**; Palmisano, A; Mercati, K; Zompatori, M; **Maggiore, U** (2011) [\*Subclinical Interstitial Lung Abnormalities in Stable Renal Allograft Recipients in the Era of Modern Immunosuppression\*](#) TRANSPLANTATION PROCEEDINGS 43(7):2617-2623 **IF=0.993** [Article]

Background. Interstitial lung abnormalities have been detected in up to 24% of kidney transplant patients receiving traditional immunosuppressive therapies (eg, cyclosporine, azathioprine); they usually occur early after transplantation and tend to resolve over time. Newer immunosuppressants such as mycophenolic acid and, particularly, mammalian target of rapamycin (mTOR) inhibitors (eg, sirolimus) may cause significant lung toxicity. However, the prevalence and severity of interstitial lung lesions in long-term, stable kidney transplant patients receiving either traditional or newer immunosuppressants is not known. Methods. We conducted a prospective, cross-sectional study examining high-resolution lung computed tomography (CT) scans in 63 stable kidney transplant recipients whose immunosuppressive therapy had remained unchanged for over 24 months. We compared CT findings of patients taking newer (mycophenolic acid and mTOR inhibitors) and traditional (calcineurin inhibitors and azathioprine) immunosuppressive drugs. Results. Interstitial lung alterations were observed in only 3/63 patients (4.8%); the prevalence was 11.5% (3/26) versus 0% (0/37) among the newer versus traditional immunosuppressive therapy groups, respectively (P = .065). The CT patterns were usual interstitial pneumonia and nonspecific interstitial pneumonia-like. The median time between transplant and CT was 49 months in the three patients with CT alterations and 95 months in the remaining 23 patients on newer immunosuppressants. It was 75 months for all patients on newer immunosuppressive drugs and 133 months

for those on traditional therapies ( $P = .0015$ ). A follow-up CT, performed in 2/3 patients with interstitial abnormalities, showed that the lesions were stable in one, while they had disappeared in the other. Conclusions. Interstitial lung abnormalities are infrequent and mild in stable kidney transplant patients treated with newer as well as traditional immunosuppressive drugs. As such abnormalities were detected in patients screened earlier after transplantation, the time since transplantation rather than the drug type is probably the major determinant

**9) Bianchi, B; Ferri, A; Ferrari, S; Copelli, C; Leporati, M; Sesenna, E** (2011) [\*ALTERNATE APPROACHES TO RECIPIENT VESSELS IN MAXILLARY RECONSTRUCTION\*](#) MICROSURGERY 31(7):580-581 **IF=1.555** [Letter]

**10) Boccaletti, V; Accorsi, P; Pinelli, L; Ungari, M; Giordano, L; Neri, I; De Panfilis, G** (2011) [\*Congenital Systematized Basaloid Follicular Hamartoma with Microphthalmia and Hemimegalencephaly\*](#) PEDIATRIC DERMATOLOGY 28(5):555-560 **IF=1.117** [Article]

The lines of Blaschko are a cutaneous pattern of mosaicism present in a variety of skin disorders. Developmental abnormalities affecting other tissues derived from the embryonic ectoderm and mesoderm are sometimes associated. Here, we describe a 5-year-old boy with basaloid follicular hamartoma affecting the left side of the body in linear multiple bands, following Blaschko lines. Lesions were predominantly hypopigmented macules and streaks, but among these, we could observe brownish atrophic patches and brown papules. Furthermore, ipsilateral hemimegalencephaly and microphthalmia were present. These findings suggest a neurocutaneous condition recently described by Happle and Tinschert. Its nosologic classification will be discussed.

**11) Bocchi, L; Savi, M; Graiani, G; Rossi, S; Agnetti, A; Stillitano, F; Lagrasta, C; Baruffi, S; Berni, R; Frati, C; Vassalle, M; Squarcia, U; Cerbai, E; Macchi, E; Stilli, D; Quaini, F; Musso, E** (2011) [\*Growth Factor-Induced Mobilization of Cardiac Progenitor Cells Reduces the Risk of Arrhythmias, in a Rat Model of Chronic Myocardial Infarction\*](#) PLOS ONE 6(3):- **IF=4.411** [Article]

**12) Bochud, PY; Bibert, S; Negro, F; Haagmans, B; Soulier, A; Ferrari, C; Missale, G; Zeuzem, S; Pawlotsky, JM; Schalm, S; Hellstrand, K; Neumann, AU; Lagging, M** (2011) [\*IL28B polymorphisms predict reduction of HCV RNA from the first day of therapy in chronic hepatitis C\*](#) JOURNAL OF HEPATOLOGY 55(5):980-988 **IF=9.334** [Article]

**13) Bonaguri, C; Melegari, A; Ballabio, A; Parmeggiani, M; Russo, A; Battistelli, L; Aloe, R; Trenti, T; Lippi, G** (2011) [\*Italian multicentre study for application of a diagnostic algorithm in autoantibody testing for autoimmune rheumatic disease: Conclusive results\*](#) AUTOIMMUNITY REVIEWS 11(1):1-5 **IF=6.556** [Review]

Aim: The presence of specific auto-antibodies in serum (i.e., antinuclear antibodies or ANA, anti-extractable nuclear antigens or anti-ENA, and anti-double stranded DNA or anti-dsDNA) is one of the major criteria in the diagnostics of Autoimmune Rheumatic Disease. As such, the request for these tests has grown exponentially in laboratory practice. The aim of this study is to describe the implementation of a joint laboratory-clinics guideline for reducing clinically inappropriate requests for autoantibody testing in a broad geographic area (Parma, Modena, Piacenza, Reggio-Emilia)

for the diagnosis of Autoimmune Rheumatic Disease. Methods: This study, supported by a Regional grant for innovative research projects started in January 2008, is an observational research aimed at comparing the number of ANA, anti-dsDNA and anti-ENA testing as well as the percentage of positive test results before and after implementation of the diagnostic algorithm in hospitalized patients. A multidisciplinary team consisting of clinical immunologist and laboratory scientists was established, with the aim of collecting and analysing diagnostic criteria, clinical needs, laboratory report formats, analytical procedures, as well as the number of tests performed. The laboratory results and the clinical protocol were both validated by data emerging from the clinical follow-up studies. Results: A joint guideline for auto-antibody testing, placing ANA test at the first level, has been developed and implemented since January 2009. The results for the period January-June 2009 (12,738 tests) were compared with those of the same period in 2008 (13,067 tests). A significant reduction in the number of anti-dsDNA (-26%) and anti-ENA (-15%) was observed. The percentage of second-level tests positivity after implementation of the diagnostic protocol had also consistently increased for both ENA (13% vs 17%) and dsDNA (9% vs 11%). Discussion: The development and implementation of algorithms for the diagnostics of Autoimmune Rheumatic Disease in hospitalized patients was associated with a reduction in the number of second-level tests, but also with an increased diagnostic specificity. This outcome attests that close collaboration and audit between clinicians, laboratory specialists and healthcare services is effective to develop efficient diagnostic algorithms for both hospitalized patients and outpatients. (C) 2011 Elsevier B.V. All rights reserved.

**14) Bruschi, M; Carnevali, ML; Murtas, C; Candiano, G; Petretto, A; Prunotto, M; Gatti, R; Argentiero, L; Magistroni, R; Garibotto, G; Scolari, F; Ravani, P; Gesualdo, L; **Allegri, L**; Ghiggeri, GM (2011) [Direct characterization of target podocyte antigens and auto-antibodies in human membranous glomerulonephritis: Alfa-enolase and borderline antigens](#) JOURNAL OF PROTEOMICS 74(10):2008-2017 IF=5.074 [Article]**

**15) Buzio, C; Oliva, E (2011) [Diagnosis of Churg-Strauss syndrome: eotaxin-3 makes it easier](#) RHEUMATOLOGY 50(10):1737-1738 IF=4.171 [Editorial Material]**

**16) Cagini, C; Fiore, T; Leontiadis, A; Biondi, L; **Leaci, R**; Delfini, E; **Macaluso, C** (2011) [Simultaneous Descemet Stripping Automated Endothelial Keratoplasty and Aphakic Iris-Fixated Intraocular Lens Implantation: A Case Series](#) CORNEA 30(10):1167-1169 IF=1.762 [Article]**

Purpose: To report 3 cases of simultaneous Descemet stripping automated endothelial keratoplasty (DSAEK) and aphakic iris-fixated intraocular lens (IOL) implantation in patients with aphakia and bullous keratopathy. Methods: We retrospectively documented the clinical characteristics of patients before and after simultaneous DSAEK and aphakic iris-fixated IOL implantation undergoing operation between November 2008 and September 2009. Results: None of the cases showed any intraoperative complications. During the postoperative period, the corneal lenticule was clear and well-attached, and the iris-fixated IOL was well-positioned. Conclusions: Simultaneous DSAEK and aphakic iris-fixated IOL implantation can be used successfully and simultaneously in patients with aphakia and bullous keratopathy.

**17) Carelli, V; La Morgia, C; Valentino, ML; Rizzo, G; Carbonelli, M; De Negri, AM; Sadun, F; **Carta, A**; Guerriero, S; Simonelli, F; Sadun, AA; Aggarwal, D; Liguori, R; Avoni, P; Baruzzi, A; Zeviani, M;**

Montagna, P; Barboni, P (2011) [\*Idebenone Treatment In Leber's Hereditary Optic Neuropathy\*](#). BRAIN 134():- **IF=9.23** [Letter]

**18)** Carmi, C; Lodola, A; Rivara, S; Vacondio, F; Cavazzoni, A; Alfieri, RR; **Ardizzoni, A**; Petronini, PG; Mor, M (2011) [\*Epidermal Growth Factor Receptor Irreversible Inhibitors: Chemical Exploration of the Cysteine-Trap Portion\*](#). MINI-REVIEWS IN MEDICINAL CHEMISTRY 11(12):1019-1030 **IF=2.622** [Review]

**19)** Carra, MC; Rompre, PH; Kato, T; **Parrino, L**; **Terzano, MG**; Lavigne, GJ; **Macaluso, GM** (2011) [\*Sleep bruxism and sleep arousal: an experimental challenge to assess the role of cyclic alternating pattern\*](#). JOURNAL OF ORAL REHABILITATION 38(9):635-642 **IF=1.462** [Article]

Rhythmic masticatory muscle activity (RMMA) is the characteristic electromyographic pattern of sleep bruxism (SB), a sleep-related motor disorder associated with sleep arousal. Sleep arousals are generally organised in a clustered mode known as the cyclic alternating pattern (CAP). CAP is the expression of sleep instability between sleep maintaining processes (phase A1) and stronger arousal processes (phases A2 and A3). This study aimed to investigate the role of sleep instability on RMMA/SB occurrence by analysing CAP and electroencephalographic (EEG) activities. The analysis was performed on the sleep recordings of 8 SB subjects and 8 controls who received sensory stimulations during sleep. Baseline and experimental nights were compared for sleep variables, CAP, and EEG spectral analyses using repeated measure ANOVAs. Overall, no differences in sleep variables and EEG spectra were found between SB subjects and controls. However, SB subjects had higher sleep instability (more phase A3) than controls ( $P = 0.05$ ). The frequency of phase A3 was higher in the pre-REM sleep periods ( $P < 0.001$ ), where peaks in RMMA/SB activity were also observed ( $P = 0.05$ ). When sleep instability was experimentally increased by sensory stimuli, both groups showed an enhancement in EEG theta and alpha power ( $P = 0.04$  and  $0.02$ , respectively) and significant increases in sleep arousal and all CAP variables. No change in RMMA/SB index was found within either groups (RMMA/SB occurred in all SB subjects and only one control during the experimental night). These findings suggest that CAP phase A3 may act as a permissive window rather than a generator of RMMA/SB activity in predisposed individuals.

**20)** Ceccaroni, M; **Berretta, R**; Malzoni, M; Scioscia, M; Roviglione, G; Spagnolo, E; **Rolla, M**; Farina, A; Malzoni, C; De Iaco, P; Minelli, L; Bovicelli, L (2011) [\*Vaginal cuff dehiscence after hysterectomy: a multicenter retrospective study\*](#). EUROPEAN JOURNAL OF OBSTETRICS & GYNECOLOGY AND REPRODUCTIVE BIOLOGY 158(2):308-313 **IF=1.764** [Article]

Objective: This study estimates the incidence of vaginal cuff dehiscence resulting from different approaches to hysterectomy. Study design: This multicentric study was carried out retrospectively. we retrospectively analyzed 8635 patients; 37% underwent abdominal hysterectomy, 31.2% vaginal hysterectomy, and 31.8% laparoscopic hysterectomy. All the hysterectomies were considered, vaginal evisceration was registered and analyzed for time of onset, trigger event, presenting symptoms, details of prolapsed organs and type of repair surgery. Continuous variables were compared using the one-way analysis of variance between groups as all data followed a Gaussian distribution, as confirmed by the Kolmogorov-Smirnov test. Differences among subgroups were assessed using the Tukey-Kramer multiple comparisons test. Categorical variables were compared with two tailed Chi-square tests with Yates correction or Fisher's exact test, as appropriate. Pearson's linear correlation was used to verify linear relationships between the



dehiscence interval and patient's age at surgery. Results: Thirty-four patients (0.39%) experienced vaginal evisceration. The laparoscopic route was associated with a significantly higher incidence of dehiscence ( $p < 0.05$ ). No differences were found between the 6027 patients (69.8%) who had closure of the vaginal cuff and the 2608 (30.2%) who had an unclosed cuff closure technique. Conclusion: Vaginal evisceration after hysterectomy is a rare gynecological surgical complication. Sexual intercourse before the complete healing of the vaginal cuff is the main trigger event in young patients, while evisceration presents as a spontaneous event in elderly patients. Surgical repair can be performed either vaginally or laparoscopically with similar outcomes. (C) 2011 Elsevier Ireland Ltd. All rights reserved.

**21) Ceresini, G; Ceda, GP; Lauretani, F; Maggio, MG; Bandinelli, S; Guralnik, JM; Cappola, AR; Usberti, E; Morganti, S; Valenti, G; Ferrucci, L (2011)** [\*Mild thyroid hormone excess is associated with a decreased physical function in elderly men\*](#) AGING MALE 14(4):213-219 **IF=1.674** [Article]

Introduction: In the adult, subclinical hyperthyroidism (Shyper) may alter skeletal muscle mass and strength. However, whether these effects are present in elderly subjects is not known. We explored the relationship between mild hyperthyroidism and physical function in a population-based sample of older persons. Methods: In a cross-sectional analysis, calf muscle cross-sectional area (CMA), handgrip strength, nerve conduction velocity (NCV), and Short Physical Performance Battery (SPPB) scores were compared between 364 euthyroid (Eut) and 28 Shyper men as well as between 502 Eut and 39 Shyper women. In a longitudinal analysis, we evaluated the relationship between baseline plasma TSH, FT3 and FT4 and the 3-year change in SPPB score in 304 men and 409 women who were euthyroid at enrolment. Results: At the cross-sectional analysis, Shyper men, but not women, had a significantly ( $p = 0.02$ ) lower SPPB score than Eut controls, although with comparable CMA, grip strength and NCV, and were more likely to have poor physical performance (odds ratio = 2.97,  $p < 0.05$ ). Longitudinal analysis showed that in Eut men higher baseline FT4 was significantly ( $p = 0.02$ ) predictive of a lower SPPB score at the 3-year follow-up. Conclusion: Even a modest thyroid hormone excess is associated with a reduced physical function in elderly men.

**22) Coccini, T; Roda, E; Castoldi, AF; Poli, D; Goldoni, M; Vettori, MV; Mutti, A; Manzo, L (2011)** [\*Developmental exposure to methylmercury and 2,2',4,4',5,5'-hexachlorobiphenyl \(PCB153\) affects cerebral dopamine D1-like and D2-like receptors of weanling and pubertal rats\*](#) ARCHIVES OF TOXICOLOGY 85(10):1281-1294 **IF=4.041** [Article]

**23) Coiro, V; Volpi, R; Cataldo, S; Magotti, MG; Giumelli, C; Russo, F; Stella, A; Chiodera, P (2011)** [\*Glucoreceptors located in the brain mediate NPY release induced by hypoglycemia in normal men\*](#) REGULATORY PEPTIDES 172(40969):41-43 **IF=2.473** [Article]

The NPY secretory pattern after an insulin tolerance test (ITT) (0.15 IU/kg body weight) was evaluated in 8 normal men. They were infused with normal saline (control test), glucose or fructose. Insulin-induced hypoglycemia produced a significant increment in serum NPY in the control test. The infusion of fructose was unable to change the NPY secretory pattern during insulin-induced hypoglycemia. In contrast, the NPY increase during ITT was completely abolished when the concomitant infusion of glucose prevented insulin-induced hypoglycemia. These results exclude a direct role of hyperinsulinemia in the mechanism underlying the stimulation of NPY secretion during ITT. Furthermore, since glucose but not fructose crosses the blood-brain-barrier (BBB), the NPY increase during ITT appears to be generated by low glucose concentrations at the level of glucosensitive areas located inside the brain. (C) 2011 Elsevier B.V. All rights reserved.

**24) Coiro, V; Volpi, R; Stella, A;** Maccanelli, F; Araldi, A; Giumelli, C; **Magotti, MG; Cataldo, S; Chiodera, P** (2011) [\*Inhibitory effect of somatostatin on the NPY response to insulin-induced hypoglycemia and the role of endogenous opioids\*](#) REGULATORY PEPTIDES 170(40969):62-64 **IF=2.473** [Article]

The present study was undertaken in order to establish whether somatostatin (SRIH) is able to modify the neuropeptide Y (NPY) response to insulin-induced hypoglycemia during insulin tolerance test (ITT) in man. In addition, the possible involvement of opioid peptides in the mediation of hypoglycemia and/or SRIH action was investigated. Subjects were injected intravenously with 0.15 IU/kg insulin alone (control test) or with SRIH (4.1  $\mu$ g/min/90 min), naloxone (10 mg in an iv bolus) or the combination of the two substances. Plasma NPY concentrations rose significantly during ITT. The NPY response was significantly reduced by the treatment with SRIH. The administration of naloxone did not modify NPY levels whereas when both SRIH and naloxone were given. NPY response to hypoglycemia did not differ from that observed in the control test. These data demonstrate that SRIH inhibits the NPY response to hypoglycemia. Naloxone-sensitive endogenous opiates do not seem to be involved in the control of hypoglycemia-induced NPY release. In contrast, since naloxone reversed the inhibiting effect of SRIH, an involvement of opioid peptides in the SRIH action may be supposed. (C) 2011 Elsevier B.V. All rights reserved.

**25) Corradi, D;** Wenger, DE; Bertoni, F; Bacchini, P; Bosio, S; Goldoni, M; Unni, KK; Sim, FH; Inwards, CY (2011) [\*Multicentric Osteosarcoma Clinicopathologic and Radiographic Study of 56 Cases\*](#) AMERICAN JOURNAL OF CLINICAL PATHOLOGY 136(5):799-807 **IF=2.504** [Article]

Multicentric osteosarcoma (M-OGS) is characterized by multicentricity of osseous osteosarcomas, either synchronous or metachronous, without visceral involvement. The study's purpose was to clinicopathologically and radiographically analyze 56 cases of M-OGS (22 synchronous and 34 metachronous). The distal femur was the most common site. Histologically, all tumors were high grade. Of 22 patients with synchronous M-OGS, 16 had 3 or more simultaneous tumors; the axial skeleton was involved in 14 (64%) of 22 cases. In metachronous M-OGS, the second malignancy occurred after a median of 22 months. Treatment was surgery, chemotherapy, radiotherapy, or a combination of these. Patients with metachronous osteosarcoma had a median survival longer than did patients with synchronous tumors. Overall, 8 long-term survivors were treated by aggressive surgery with wide margins (plus chemotherapy and/or radiotherapy). M-OGS combines multiple skeletal locations of high-grade conventional osteosarcomas and has a poor prognosis. Aggressive surgery may result in improved long-term survival, particularly in patients with metachronous disease.

**26) Corradi, M;** Romano, C; **Mutti, A** (2011) [\*Laboratory animal allergy\*](#) MEDICINA DEL LAVORO 102(5):428-444 **IF=0.391** [Article]

Laboratory animal allergy. Laboratory animal allergy (LAA) may develop when susceptible persons are exposed to allergens produced by laboratory animals. LAA is associated with exposure to urine, fur, and saliva of rats, mice, guinea pigs, dogs and rabbits. Approximately 30% of persons who are exposed to laboratory animals may develop LAA and some will also develop asthma. LAA is most likely to occur in persons with previously known allergies, especially to domestic pets. The majority of LAA sufferers experience symptoms within six months their first exposure to laboratory animals; almost all develop symptoms within three years. The most common symptoms are watery eyes and an itchy, runny nose, although skin symptoms and lower respiratory tract symptoms may also occur. Feeding and handling laboratory animals or cleaning their cages generates ten times the amount of allergens compared with



undisturbed conditions. Prevention of animal allergy depends on control of allergenic material in the work environment and on organizational and individual protection measures. Pre-placement evaluation and periodic medical surveillance of workers are important pieces of the overall occupational health programme. The emphasis of these medical evaluations should be on counselling and early disease detection.

**27) Costi, R;** Le Bian, A; Creuze, N; Prevot, S; Cauchy, F; **Violi, V;** Smadja, C (2011) [\*Hemoperitoneum Caused by a Ruptured GIST Located in the Posterior Gastric Wall Managed by Endoscopic Diagnosis and Laparoscopic Treatment: Case Report and Literature Review\*](#) SURGICAL LAPAROSCOPY ENDOSCOPY & PERCUTANEOUS TECHNIQUES 21(6):E316-E318 **IF=1** [Review]

A case of hemoperitoneum caused by a ruptured gastrointestinal stromal tumor (GIST) of the posterior gastric wall is presented. An otherwise healthy 81-year-old man presented with abdominal pain/tenderness and anemia (hemoglobin: 7.4 g/dL). Computed tomography scan showed hemoperitoneum and a gastric mass of uncertain nature. As the patient was hemodynamically stable, a mini-invasive approach was decided. Esophagogastrosocopy revealed an umbilicated mass of the posterior gastric wall, therefore allowing for a correct preoperative diagnosis of GIST and its appropriate treatment by laparoscopic atypical gastrectomy. Laparoscopically, a longitudinal resection of gastric fundus including the tumor was performed in a sleeve gastrectomy fashion, 25 minutes after the induction of pneumoperitoneum. The outcome was uneventful. Pathologic examination confirmed a benign 4 x 3-cm gastric GIST with < 1 mitosis per 50 high power field, staining positive for CD117 (C-KIT) and negative for S-100 protein and smooth muscle actin. To our knowledge, it is the first case of a successful laparoscopic resection of an endoscopically diagnosed gastric GIST in an emergency setting. Hemoperitoneum is a rare, potentially severe complication of GIST. As bleeding is rarely severe, most patients may benefit from a mini-invasive approach, even if the tumor is located in the posterior gastric wall.

**28) D'Adda, T; Pizzi, S;** Bottarelli, L; **Azzoni, C;** Manni, S; **Giordano, G** (2011) [\*Metaplastic Papillary Tumor of the Salpinx: Report of a Case Using Microsatellite Analysis\*](#) INTERNATIONAL JOURNAL OF GYNECOLOGICAL PATHOLOGY 30(6):532-535 **IF=2.076** [Article]

Metaplastic papillary tumor (MPT) of the salpinx is a rare lesion found in the lumen of fallopian tubes during the postpartum period. This lesion is very small and is composed microscopically of papillae lined by stratified epithelium. Similar to serous borderline ovarian tumors (BOTs), epithelial elements of MPT show a budding, abundant, dense, and eosinophilic cytoplasm, bland nuclei or with mild atypia. It is not clear whether this lesion is a papillary metaplastic proliferation or a small atypical proliferative (borderline) serous tumor associated with pregnancy. Owing to its rarity, MPT has never been investigated in molecular studies and compared with ovarian serous neoplasms. In this study, a case of tubal MPT was molecularly examined and compared with 4 BOTs and with 2 low-grade ovarian carcinomas, using microsatellite analysis with 13 markers at 8 chromosomal regions involved in ovarian carcinogenesis. The tubal MPT and one of the BOTs showed no alterations in the investigated chromosomal regions. The remaining 3 BOTs showed only single allelic imbalances. Instead, low-grade serous carcinomas showed a higher frequency of alterations, including allelic imbalance at chr10q23, 1p36, 9p22, and 17. In conclusion, this study provides, for the first time, molecular data on an MPT of the fallopian tube, indicating that this entity might share both morphologic and molecular similarities with a subset of minimally altered BOTs, termed atypical proliferative serous tumors, which behave in a benign manner. However, in our opinion, further molecular studies should be conducted on other cases of MPTs to confirm this hypothesis.

29) Danelli, G; Ghisi, D; Bellinghieri, F; Borghi, B; **Fanelli, G**; Chelly, JE (2011) [\*The nerve stimulation technique versus the loss of resistance technique for the posterior approach to lumbar plexus block: a randomized, prospective, observer-blinded, pilot study\*](#) MINERVA ANESTESIOLOGICA 77(10):959-963 **IF=2.581** [Article]

30) Daves, M; Cemin, R; Fattor, B; Cosio, G; Salvagno, GL; Rizza, F; **Lippi, G** (2011) [\*Evaluation of hematocrit bias on blood glucose measurement with six different portable glucose meters\*](#) BIOCHEMIA MEDICA 21(3):306-311 **IF=1.085** [Article]

Introduction: Measurement and monitoring of blood glucose levels in hospitalized patients with portable glucose meters (PGMs) is performed widely and is an essential part of diabetes monitoring, despite the increasing evidence of several interferences which can negatively bias the accuracy of measurements. The purpose of this study was to evaluate the effect of the hematocrit on the analytical performances of different PGMs as compared with a reference laboratory assay. Materials and methods: The effect of various hematocrit values (similar to 0.20, similar to 0.45 and similar to 0.63 L/L) were assessed in three whole blood specimens with different glucose concentration (similar to 11, similar to 13.3, and similar to 25 mmol/L) by using six different commercial PGMs. The identical samples were also tested with the laboratory reference assay (i.e., hexokinase). The percentage difference from the laboratory assay (%Diff) was calculated as follows: % Diff = average PGM value - value from laboratory assay x 100/value from laboratory assay. Results: The %Diff of the six different PGMs were rather broad, and comprised between 56.5% and -34.8% in the sample with low glucose concentration (similar to 1.1 mmol/L), between 40% and -32% in the sample with high glucose concentration (similar to 13.3 mmol/L), and between -50% and 15% in the sample with very high glucose concentration (similar to 25 mmol/L), respectively. It is also noteworthy that a very high hematocrit value (up to 0.63 L/L) generated a remarkable negative bias in blood glucose (-35%) as measured with the laboratory assay, when compared with the reference sample (hematocrit 0.45 L/L). Conclusion: The results of this analytical evaluation clearly confirm that hematocrit produces a strong and almost unpredictable bias on PGMs performances, which is mainly dependent on the different type of devices. As such, the healthcare staff and the patients must be aware of this limitation, especially in the presence of extreme hematocrit levels, when plasma glucose assessment with the reference laboratory technique might be advisable.

31) Daves, M; Cemin, R; Floreani, M; Pusceddu, I; Cosio, G; **Lippi, G** (2011) [\*Comparative evaluation of capillary zone electrophoresis and HPLC in the determination of carbohydrate-deficient transferrin\*](#) CLINICAL CHEMISTRY AND LABORATORY MEDICINE 49(10):1677-1680 **IF=2.069** [Article]

Background: Transferrin (Tf) glycoform lacking one or two complete or incomplete glycan chains (i.e., asialo-monosialo- and disialo-Tf) typically appear in blood after chronic alcohol consumption, though recently it was reported that monosialo-Tf is associated with trisialo-Tf but not with alcohol consumption. These glycoforms are collectively known as carbohydrate-deficient transferrin (CDT). Since samples from alcoholic patients are characterized by decreased sialic acid content in serum transferrin, the assessment of CDT is thereby widely used for laboratory evaluation of chronic alcohol abuse. Methods: CDT analysis has been performed in 6011 consecutive subjects undergoing national mandatory testing after the confiscation of driving license for driving under the influence of alcohol. Out of the 6011 specimens, 539 (9%) displayed values exceeding the specific cut-off (>1.3%) on multicapillary electrophoresis (MCE) (Capillarys2 Sebia, France), and were further analyzed with a routine high-pressure liquid

chromatography (HPLC) technique. Results: The overall correlation between the methods in the total 539 samples was satisfactory, displaying a correlation coefficient ( $r$ ) of 0.960. Nevertheless, the correlation was lower in the group with CDT values comprised between 1.3% and 1.9% (group 1;  $r=0.60$ ) than in those with CDT values) 2.0% (group 2;  $r=0.98$ ). Moreover, the discordance between values exceeding the method-specific threshold in the former group of samples was also remarkably high (62% of samples in group 1 vs. 0.6% in group 2). Finally, a significant difference of CDT values was observed in group 1 ( $p<0.001$ ), and in group 2 ( $p<0.0001$ ) by Wilcoxon test. Conclusions: The MCE is characterized by a high throughput and it seems a suitable approach for laboratory monitoring of alcohol abuse when CDT is used as medical parameter in the diagnosis and follow-up of heavy drinking. However, CDT measured by screening techniques must be confirmed by a confirmatory technique, in particular for forensic purpose.

**32) Del Rio, P; Cataldo, S; Pisani, P; De Simone, B; Iapichino, G; Sianesi, M (2011)** [\*Use of oxidized and regenerated cellulose in thyroid surgery: a prospective analysis as cause of postoperative hypocalcemia on 485 patients consecutively treated\*](#) MINERVA ENDOCRINOLOGICA 36(3):157-162 **IF=1.237** [Article]

Aim. The intraoperative hemorrhage determines an higher risk of parathyroid glands lesions, and laryngeal nerve injuries. We have examined if the use of oxidized and regenerated cellulose could be a cause of postoperative hypocalcemia because of the compression on the parathyroid glands or for tissue adhesions Methods. From June 2009 to December 2010 we have examined 485 patients consecutively treated with total thyroidectomy. The cases examined were divided in two groups on the use of ionized cellulose (group A and B). 24 hours after surgical procedure, all patients were submitted to serum calcium evaluation. The data were analyzed with chi(2) test and t-student test;  $P<0.05$  was statistically significant. Results. We have selected 372 cases out of 485 examined. We have registered after 10 hours from surgical procedure a case of hemorrhage with reintervention in group B (no use of cellulose). The cost of ionized cellulose is (sic) 46; we have used this device in 212 cases on 372 patients undergone to total thyroidectomy, with a cost of (sic) 9 752. The mean value of the serum calcium was statistically different between pre- and postoperative evaluation in all cases ( $P<0.0001$ ) divided both on gender and on the use of hemostatic devices. Conclusion. In our experience, there isn't a statistically significant difference on incidence of postoperative hypocalcemia, related to use of ionized and regenerated cellulose on mean surgical time in all patients either treated with traditional surgery or with video-assisted procedure.

**33) Diciotti, S; Sverzellati, N; Kauczor, HU; Lombardo, S; Falchini, M; Favilli, G; Macconi, L; Kuhnigk, JM; Marchiano, A; Pastorino, U; Zompatori, M; Mascalchi, M (2011)** [\*Defining the Intra-subject Variability of Whole-lung CT Densitometry in Two Lung Cancer Screening Trials\*](#) ACADEMIC RADIOLOGY 18(11):1403-1411 **IF=2.195** [Article]

Rationale and Objectives: To define a statistically based variation of individual whole-lung densitometry above which a real increase of pulmonary extent can be suspected in lung cancer screening trials. Materials and Methods: Baseline and 3-month follow-up low-dose computed tomography (LDCT) examinations of 131 smokers or former smokers recruited in the ITALUNG (32 subjects) and MILD (99 subjects) trials were compared using for each data set two different image processing tools for whole-lung densitometry. Both trials were approved by institutional review boards, and written informed consent was obtained from all participants. Assuming that no change of emphysema extent can occur in a 3-month interval, the Bland and Altman method was used to assess the agreement between baseline and follow-up LDCT examinations for lung volume, 15th percentile (Perc15) of lung density and Perc15 corrected for lung volume by application of a linear detrend on log-transformed data. Results: Similar results were obtained in each data set using two

different image processing tools. In the ITALUNG cohort the 95% limits of agreement (LoA) interval of volume corrected Perc15 was -9.7 to 10.7% using image processing method 1 and -10.3 to 11.5% using image processing method 2. In the MILD cohort, the 95% LoA interval of volume corrected Perc15 was -14.7 to 17.3% with both image processing methods. Conclusion: In the two considered lung cancer screening settings a range of 9.7-14.7% decrease of volume corrected Perc15 represents a statistically defined threshold to suspect a real increase of emphysema extent in serial LDCT examinations.

**34)** D'Onofrio, A; Mazzucco, A; Valfre, C; Zussa, C; Martinelli, L; Casabona, R; Mazzola, A; **Gherli, T**; Badano, LP; Fabbri, A (2011) [\*Left Ventricular Remodeling, Hemodynamics and Early Clinical Outcomes after Aortic Valve Replacement with the Pericarbon Freedom Stentless Bioprosthesis: Results from the Italian Prospective Multicenter Trial\*](#) JOURNAL OF HEART VALVE DISEASE 20(5):531-539 **IF=0.927** [Article]

**35)** D'Onofrio, A; Rubino, P; Fusari, M; Salvador, L; Musumeci, F; Rinaldi, M; Vitali, EO; Glauber, M; Di Bartolomeo, R; Alfieri, OR; Polesel, E; Aiello, M; Casabona, R; Livi, U; Grossi, C; Cassese, M; Pappalardo, A; **Gherli, T**; Stefanelli, G; Faggian, GG; Gerosa, G (2011) [\*Clinical and hemodynamic outcomes of "all-comers" undergoing transapical aortic valve implantation: Results from the Italian Registry of Trans-Apical Aortic Valve Implantation \(I-TA\)\*](#) JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY 142(4):768-775 **IF=3.608** [Article]

**36)** Falcioni, M; **Fois, P**; Taibah, A; Sanna, M (2011) [\*Facial nerve function after vestibular schwannoma surgery Clinical article\*](#) JOURNAL OF NEUROSURGERY 115(4):820-826 **IF=2.739** [Article]

Object. The object of this study was to evaluate long-term postoperative facial nerve (FN) function in patients undergoing vestibular schwannoma (VS) surgery. Methods. The authors retrospectively reviewed the clinical course of patients affected by isolated VSs with normal preoperative FN function, with no previous surgical or radiotherapeutic treatment, and who underwent surgery between 1987 and 2007. Facial nerve function was clinically evaluated according to the House-Brackmann (HB) scale. The minimum postoperative follow-up was 12 months. Results. Among the 1550 patients surgically treated at the authors' center, 1151 matched inclusion criteria for the present study. The FN was anatomically interrupted in 48 cases (4.2%), and 51 patients (4.4%) underwent subtotal tumor removal and were considered separately. Among the 1052 patients with anatomically preserved FNs and total tumor removal, 684 (65%) enjoyed postoperative HB Grade I or II and 309 (29.4%) enjoyed Grade III, with the remaining 59 cases (5.6%) suffering unsatisfactory results (HB Grades IV-VI). As expected, FN function results deteriorated in cases of larger tumors. Conclusions. The main factor influencing postoperative FN function was tumor size. Although there was a progressive deterioration in FN function outcome in relation to tumor size, a cutoff point between satisfactory and unsatisfactory results could be identified at around 2 cm in maximum extrameatal tumor diameter, with the "optimal size" for surgery identified at < 1 cm. This finding emphasizes the importance of an early diagnosis and should be kept in mind when selecting the correct timing for VS removal. For small lesions, the results following a middle cranial fossa approach were significantly worse as compared with those following the translabyrinthine and retrosigmoid-retrolabyrinthine approaches. (DOI: 10.3171/2011.5.JNS101597)

37) Favalaro, EJ; Franchini, M; **Lippi, G** (2011) [\*Coagulopathies and Thrombosis: Usual and Unusual Causes and Associations. Part V. PREFACE\*](#) SEMINARS IN THROMBOSIS AND HEMOSTASIS 37(8):859-862 **IF=4.169** [Editorial Material]

38) Favalaro, EJ; **Lippi, G**; Koutts, J (2011) [\*Laboratory testing of anticoagulants: the present and the future\*](#) PATHOLOGY 43(7):682-692 **IF=2.168** [Review]

This review provides an update on laboratory testing and monitoring for existing and emerging anticoagulants, starting with an overview of haemostasis and the routine coagulation tests currently employed within most haemostasis laboratories, including the prothrombin time (PT)/international normalised ratio (INR) and the activated partial thromboplastin time (APTT). Current anticoagulant therapy and laboratory monitoring is then discussed in terms of benefits and limitations, followed by a similar brief discussion of the new and emerging anticoagulants. The main focus, however, is laboratory testing related to vitamin K antagonists, heparin, lepirudin and the new agents dabigatran etexilate and rivaroxaban. Although the newer agents do not require laboratory monitoring, laboratory testing will occasionally be required, and pathology laboratories should become proactive in developing appropriate strategies. The tests most likely to fulfill this role are the ecarin clotting time (or chromogenic alternatives), and the chromogenic anti-Xa assay. Nevertheless, the dilute Russell viper venom time (dRVVT) assay may provide another alternative, and existing routine tests are also likely to be utilised for the foreseeable future, potentially also for laboratory testing of the new anticoagulants, albeit perhaps in modified form.

39) Ferraro, F; Lymperi, S; Mendez-Ferrer, S; Saez, B; Spencer, JA; Yeap, BY; Masselli, E; Graiani, G; **Prezioso, L**; Rizzini, EL; **Mangoni, M**; Rizzoli, V; Sykes, SM; Lin, CP; Frenette, PS; **Quaini, F**; Scadden, DT (2011) [\*Diabetes Impairs Hematopoietic Stem Cell Mobilization by Altering Niche Function\*](#) SCIENCE TRANSLATIONAL MEDICINE 3(104):- **IF=3.511** [Article]

40) Ferri, A; Ferri, T; Sesenna, E (2011) [\*Re: "A Case of Bilateral Silent Sinus Syndrome Presenting With Chronic Ocular Surface Disease"\*](#) OPHTHALMIC PLASTIC AND RECONSTRUCTIVE SURGERY 27(5):393-393 **IF=0.643** [Letter]

41) Fogagnolo, P; Sangermani, C; Oddone, F; Frezzotti, P; Iester, M; Figus, M; Ferreras, A; Romano, S; **Gandolfi, S**; Centofanti, M; Rossetti, L; Orzalesi, N (2011) [\*Pre-existing blindness in a cohort of patients with bacterial keratitis Response\*](#) BRITISH JOURNAL OF OPHTHALMOLOGY 95(11):1613-1614 **IF=2.934** [Letter]

42) Formoso, G; Paltrinieri, B; Marata, AM; Capelli, O; Baronciani, D; Di Mario, S; Voci, C; Magrini, N; **Gagliotti, C**; Pan, A; Moro, ML; Quadrino, S; Laviola, M; Fattori, G; Giuliano, S; Solfrini, V; Morandi, M; Barani, P; Bevini, M; Biagini, E; De Gesu, R; Di Pietro, M; Ferrari, A; Pontiroli, M; Stancari, M; Gamberini, L; Ghelfi, MA; Orsi, C; Pagani, M; De Rosa, M; De Luca, ML; Suyeta, T; Pedrazzini, G; Nico, A; **Brianti, E**; Bersellini, B; Coppola, MC; Corsi, V; Gallani, R; Bertelli, C; Negri, G; Emanuele, R; Fabi, M; Canovi, L; Casale, S; Mosca, L; Franzan, G; Merli, A; Piazza, F; Zoppi, M (2011) [\*Doctors and local media: a synergy\*](#)

[for public health information? A controlled trial to evaluate the effects of a multifaceted campaign on antibiotic prescribing \(protocol\)](#) BMC PUBLIC HEALTH 11():- **IF=2.364** [Article]

**43)** Franchini, M; **Lippi, G** (2011) [Immune tolerance induction for patients with severe hemophilia A: a critical literature review](#) JOURNAL OF THROMBOSIS AND THROMBOLYSIS 32(4):439-447  
**IF=1.539** [Review]

The development of inhibitors that neutralize the function of clotting factor VIII (FVIII) is currently the most challenging complication associated with the treatment of hemophilia A as it increases the disease-related morbidity and mortality. Immune tolerance induction (ITI) is the only documented strategy to eradicate persistent inhibitors in severe hemophilia A patients. Several studies have been conducted so far to identify patient- and treatment-related factors associated with greater ITI success. The currently available literature on ITI in hemophilia A will be critically reviewed in this article. In particular, we will focus on the role of the type of FVIII product on ITI outcome by analyzing the clinical and experimental data.

**44)** Franchini, M; **Lippi, G** (2011) [The use of desmopressin in acquired haemophilia A: a systematic review](#) BLOOD TRANSFUSION 9(4):377-382 **IF=2.519** [Review]

**45)** Gaibazzi, N; Rigo, F; **Reverberi, C** (2011) [Severe Coronary Tortuosity or Myocardial Bridging in Patients With Chest Pain, Normal Coronary Arteries, and Reversible Myocardial Perfusion Defects](#) AMERICAN JOURNAL OF CARDIOLOGY 108(7):973-978 **IF=3.68** [Article]

We reviewed patients with normal or near-normal coronary angiograms enrolled in the SPAM contrast stress echocardiographic diagnostic study in which 400 patients with chest pain syndrome of suspected cardiac origin with a clinical indication to coronary angiography were enrolled. Patients underwent dipyridamole contrast stress echocardiography (cSE) with sequential analysis of wall motion, myocardial perfusion, and Doppler coronary flow reserve before elective coronary angiography. Ninety-six patients with normal or near-normal epicardial coronary arteries were screened for the presence of 2 prespecified findings: severely tortuous coronary arteries and myocardial bridging. Patients were divided in 2 groups based on the presence (false-positive results, n = 37) or absence (true-negative results, n = 59) of reversible myocardial perfusion defects during cSE and compared for history and clinical and angiographic characteristics. Prevalence of severely tortuous coronary arteries (35% vs 5%, p < 0.001) or myocardial bridging (13% vs 2%, p < 0.05) was 7 times higher in patients who demonstrated reversible perfusion defects at cSE compared to those without reversible perfusion defects. No significant differences were found between the 2 groups for the main demographic variables and risk factors. Patients in the false-positive group more frequently had a history of effort angina (p < 0.001) and ST-segment depression at treadmill electrocardiography (p < 0.001). In conclusion, we hypothesize that patients with a positive myocardial perfusion finding at cSE but without obstructive epicardial coronary artery disease have a decreased myocardial blood flow reserve, which may be caused by a spectrum of causes other than obstructive coronary artery disease, among which severely tortuous coronary arteries/myocardial bridging may play a significant role. (C) 2011 Elsevier Inc. All rights reserved. (Am J Cardiol 2011;108:973-978)



**46) Gaibazzi, N;** Squeri, A; **Reverberi, C;** Molinaro, S; Lorenzoni, V; Sartorio, D; Senior, R (2011) [\*Contrast Stress-Echocardiography Predicts Cardiac Events in Patients with Suspected Acute Coronary Syndrome but Nondiagnostic Electrocardiogram and Normal 12-Hour Troponin\*](#) JOURNAL OF THE AMERICAN SOCIETY OF ECHOCARDIOGRAPHY 24(12):1333-1341 **IF=3.518** [Article]

Background: No large study has demonstrated that any stress test can risk-stratify future hard cardiac events (cardiac death or myocardial infarction) in patients with suspected acute coronary syndromes (ACS), nondiagnostic electrocardiographic (ECG) findings, and normal troponin levels. The aim of this study was to test the hypothesis that combined contrast wall motion and myocardial perfusion echocardiographic assessment (cMCE) during stress echocardiography can predict long-term hard cardiac events in patients with suspected ACS, nondiagnostic ECG findings, and normal troponin. Methods: A total of 545 patients referred for contrast stress echocardiography from the emergency department for suspected ACS but nondiagnostic ECG findings and normal troponin levels at 12 hours were followed up for cardiac events. Patients underwent dipyridamole-atropine echocardiography with adjunctive myocardial perfusion imaging using a commercially available ultrasound contrast medium (SonoVue). Results: During a median follow-up period of 12 months, 25 cardiac events (4.6%) occurred (no deaths, 12 nonfatal myocardial infarctions, 13 episodes of unstable angina). Abnormal findings on cMCE were the most significant predictor of both hard cardiac events (hazard ratio, 22.8; 95% confidence interval, 2.9-176.7) and the combined (cardiac death, myocardial infarction, or unstable angina requiring revascularization) end point (hazard ratio, 10.7; 95% confidence interval, 3.7-31.3). The inclusion of the cMCE variable significantly improved multivariate models, determining lower Akaike information criterion values and higher discrimination ability. Conclusions: cMCE during contrast stress echocardiography provided independent information for predicting hard and combined cardiac events beyond that predicted by stress wall motion abnormalities in patients with suspected ACS, nondiagnostic ECG findings, and normal troponin levels. (J Am Soc Echocardiogr 2011;24:1333-41.)

**47) Giacomelli, M;** Tamassia, N; Moratto, D; **Bertolini, P;** Ricci, G; Bertulli, C; Plebani, A; Cassatella, M; Bazzoni, F; Badolato, R (2011) [\*SH2-domain mutations in STAT3 in hyper-IgE syndrome patients result in impairment of IL-10 function\*](#) EUROPEAN JOURNAL OF IMMUNOLOGY 41(10):3075-3084 **IF=4.942** [Article]

**48) Giallauria, F;** Ling, SM; Schreiber, C; **Maggio, MG;** Shetty, V; Muller, D; Vigorito, C; Ferrucci, L; Najjar, SS (2011) [\*Arterial Stiffness and Bone Demineralization: The Baltimore Longitudinal Study of Aging\*](#) AMERICAN JOURNAL OF HYPERTENSION 24(9):970-975 **IF=3.129** [Article]

**49) Giamberti, A;** Chessa, M; **Ballotta, A;** Varrica, A; **Agnetti, A;** Frigiola, A; Ranucci, M (2011) [\*Functional Tricuspid Valve Regurgitation in Adults with Congenital Heart Disease: An Emerging Problem\*](#) JOURNAL OF HEART VALVE DISEASE 20(5):565-570 **IF=0.927** [Article]

**50) Giuliani, N;** Airoidi, I (2011) [\*Novel Insights into the Role of Interleukin-27 and Interleukin-23 in Human Malignant and Normal Plasma Cells\*](#) CLINICAL CANCER RESEARCH 17(22):6963-6970 **IF=7.338** [Article]

Multiple myeloma is a monoclonal postgerminal center tumor that has phenotypic features of plasmablasts and/or

plasma cells and usually localizes at multiple sites in the bone marrow. The pathogenesis of multiple myeloma is complex and dependent on the interactions between tumor cells and their microenvironment. Different cytokines, chemokines, and proangiogenic factors released in the tumor microenvironment are known to promote multiple myeloma cell growth. Here, we report recent advances on the role of 2 strictly related immunomodulatory cytokines, interleukin-27 (IL-27) and IL-23, in human normal and neoplastic plasma cells, highlighting their ability to (i) act directly against multiple myeloma cells, (ii) influence the multiple myeloma microenvironment by targeting osteoclast and osteoblast cells, and (iii) modulate normal plasma cell function. Finally, the therapeutic implication of these studies is discussed. Clin Cancer Res; 17(22); 6963-70. (C) 2011 AACR.

**51)** Gridelli, C; **Ardizzoni, A**; Barni, S; Crino, L; Caprioli, A; Piazza, E; Lorusso, V; Barbera, S; Zilembo, N; Gebbia, V; Adamo, V; Pela, R; Marangolo, M; Morena, R; Filippelli, G; Buscarino, C; Alabiso, O; Maione, P; Venturino, P; De Marinis, F (2011) [\*Medical treatment choices for patients affected by advanced NSCLC in routine clinical practice: Results from the Italian observational "SUN" \(Survey on the lUng cancer maNagement\) study\*](#) LUNG CANCER 74(3):462-468 **IF=3.356** [Article]

Lung cancer is the most common cancer in the world today, in terms of both incidence and mortality. Non-small cell lung cancer (NSCLC) accounts for about 85% of all lung cancers, and the majority of people diagnosed with NSCLC have locally advanced or metastatic disease. Treatment algorithms have rapidly changed in the last 10 years because of the introduction of new chemotherapeutic and targeted agents in clinical practice. SUN is a 1-year longitudinal observational multicenter study that has consecutively enrolled patients affected by stage IIIB or IV NSCLC with the aim to describe the pattern of care and evolving approaches in the treatment of advanced NSCLC. 987 consecutive NSCLC patients were enrolled between January 2007 and March 2008 at the 74 participating centers throughout Italy and a 12-month follow-up was performed. Cyto-histological diagnosis was performed mainly by bronchoscopy with only 24% by CT-scan guided fine-needle aspiration biopsy. 91.4% of the patients received a first-line medical treatment and 8.6% supportive care only. Median age of patients receiving first-line treatment was 66 years. First-line chemotherapy consisted of a single agent in 20% of patients and combination chemotherapy in 80%. The most frequently used chemotherapy regimens were cisplatin plus gemcitabine and carboplatin plus gemcitabine. Median survival of patients receiving first-line chemotherapy was 9.1 months. 32% percent of patients received a second-line treatment that consisted of chemotherapy in 71% of cases and erlotinib in 29%. Overall third-line treatment was given to 7.3% of patients. These results showed a pattern of care for advanced NSCLC that reflects the current clinical practice in Italy at the study time with a high adherence to the International guidelines by the Italian Oncologists. (C) 2011 Elsevier Ireland Ltd. All rights reserved.

**52)** Guella, I; Duga, S; **Ardissino, D**; Merlini, PA; Peyvandi, F; Mannucci, PM; Asselta, R (2011) [\*Common variants in the haemostatic gene pathway contribute to risk of early-onset myocardial infarction in the Italian population\*](#) THROMBOSIS AND HAEMOSTASIS 106(4):655-664 **IF=4.701** [Article]

**53)** Gugliotta, L; Tieghi, A; Tortorella, G; Scalzulli, PR; Ciancia, R; Lunghi, M; Cacciola, E; Cacciola, R; Candoni, A; **Crugnola, M**; Codeluppi, K; Usala, E; Specchia, G; Martinelli, V; Palmieri, F; Pierri, I; Liberati, AM; Iurlo, A; Grossi, A; Vannucchi, AM; Vianelli, N; Mazzucconi, MG (2011) [\*Low impact of cardiovascular adverse events on anagrelide treatment discontinuation in a cohort of 232 patients with essential thrombocythemia\*](#) LEUKEMIA RESEARCH 35(12):1557-1563 **IF=2.555** [Article]

**54)** Heffler, E; Nebiolo, F; Rizzini, FL; Tosoni, C; Cinquini, M; Colombo, G; Yacoub, MR; Mason, C; della Torre, F; Manzotti, G; Asero, R; Conte, M; Senna, G; Crivellaro, M; Villalta, D; De Carli, M; Ariano, R; Bertolini, C; Minale, P; **Ridolo, E**; Olivieri, E; Emiliani, F; Quercia, O; Savi, E; Peveri, S; Cortellini, G; Cecchi, L; Macchia, D; Capretti, S; Antonicelli, L; Bilo, MB; Polillo, BR; Bresciani, M; Greco, E; Murzilli, F; Colangelo, C; Di Rocco, PC; Di Claudio, F; Cervone, M; Rapone, C; Cichella, S; Lo Schiavo, M; Gargano, D; Montera, MC; Pio, A; Pezzuto, F; Munno, G; Giannoccaro, F; Longo, R; Arena, A (2011) [\*Anisakis hypersensitivity in Italy: prevalence and clinical features: a multicenter study\*](#) ALLERGY 66(12):1563-1569 **IF=6.297** [Article]

**55)** Konishi, M; **Piazza, P**; Shin, SH; Sivalingam, S; Sanna, M (2011) [\*The use of internal carotid artery stenting in management of bilateral carotid body tumors\*](#) EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY 268(10):1535-1539 **IF=1.214** [Article]

**56)** Lima-Oliveira, G; **Lippi, G**; Salvagno, GL; Montagnana, M; Scartezini, M; Guidi, GC; Picheth, G (2011) [\*Transillumination: a new tool to eliminate the impact of venous stasis during the procedure for the collection of diagnostic blood specimens for routine haematological testing\*](#) INTERNATIONAL JOURNAL OF LABORATORY HEMATOLOGY 33(5):457-462 **IF=1.368** [Article]

Introduction: The collection of diagnostic blood specimens for routine haematological testing (RHT) is traditionally performed with tourniquet. However, the transillumination devices based on cold near-infrared LEDs have been formerly proposed as a valuable tool for identifying reliable venous accesses, especially in patients with difficult or small veins, such as children. This study was aimed to evaluate whether a transillumination device can advantageously replace the use of the tourniquet during the procedure for collection of blood specimens for RHT and thereby eliminating the discomfort and risk of spurious results caused by excessive or prolonged venous stasis. Methods: Two hundred and fifty volunteers were divided into five groups (G1, G2, G3, G4 and G5) to compare the results of RHT between blood sample collected with transilluminator device (left arm) and with tourniquet application (right arm) for 30 s(G1), 60 s(G2), 90 s(G3), 120 s(G4) and 180 s(G5). Results: No significant increases were observed in any of the haematological parameters tested in G1 when compared with blood collected by the transilluminator device. From G2 to G5, significant increases were observed for the platelet count, red blood cell count, haemoglobin, haematocrit, white blood cell count, neutrophils, monocytes and eosinophils. From G3-G5, further increases were observed for lymphocytes. Clinically significant variations were, however, observed for basophils in G2; red blood cell count, haemoglobin, haematocrit and basophils in G3 and eosinophils in G3 only. Conclusion: As such, considering that inappropriate use of the tourniquet is commonplace, we conclude that transillumination devices can represent a suitable tool to eliminate the venous stasis and to improve the quality of phlebotomy procedures.

**57)** **Lippi, G** (2011) [\*Re: Jean-Nicolas Cornu, Geraldine Cancel-Tassin, Valerie Ondet, et al. Olfactory Detection of Prostate Cancer by Dogs Sniffing Urine: A Step Forward in Early Diagnosis. Eur Urol 2011;59:197-201\*](#) EUROPEAN UROLOGY 60(4):E29-E29 **IF=8.843** [Letter]

**58) Lippi, G; Aloe, R; Cervellin, G** (2011) [\*p2PSA but not total and free PSA increases after myocardial infarction: Results of a preliminary investigation\*](#) INTERNATIONAL JOURNAL OF CARDIOLOGY 153(1):119-119 **IF=6.802** [Letter]

**59) Lippi, G; Avanzini, P; Pavesi, F; Bardi, M; Ippolito, L; Aloe, R; Favalaro, EJ** (2011) [\*Studies on in vitro hemolysis and utility of corrective formulas for reporting results on hemolyzed specimens\*](#) BIOCHEMIA MEDICA 21(3):297-305 **IF=1.085** [Article]

Introduction: Spuriously hemolyzed specimens are the most common preanalytical problems in clinical laboratories. Corrective formulas have been proposed to allow the laboratory to release test results on these specimens. This study aimed to assess the influence of spurious hemolysis and reliability of corrective formulas. Materials and methods: Blood collected into lithium heparin vacuum tubes was divided in aliquots and subjected to mechanical injury by aspiration with an insulin syringe equipped with a thin needle (30 gauge). Each aliquot (numbered from "#0" to "#5") was subjected to a growing number of passages through the needle, from 0 to 5 times. After hematological testing, plasma was separated by centrifugation and assayed for lactate dehydrogenase (LD), aspartate aminotransferase (AST), potassium and hemolysis index (HI). Results: Cell-free hemoglobin concentration gradually increased from aliquot #0 (HI: 0) to #5 (HI: 76.22, cell-free hemoglobin 37.0 g/L). A highly significant inverse correlation was observed between HI and red blood cell count (RBC), hematocrit, mean corpuscular volume (MCV), LD, AST, potassium, whereas the correlation was negative with mean corpuscular hemoglobin (MCH). No correlation was found with hemoglobin, platelet count and glucose. A trend towards decrease was also observed for white blood cells count. The ANCOVA comparison of analyte-specific regression lines from the five subjects studied revealed significant differences for all parameters except potassium. In all circumstances the  $s_{y,x}$  of these equations however exceeded the allowable clinical bias. Conclusions: Mechanical injury of blood, as it might arise from preanalytical problems, occurs dishomogeneously, so that corrective formulas are unreliable and likely misleading.

**60) Lippi, G; Banfi, G** (2011) [\*Doping and Thrombosis in Sports\*](#) SEMINARS IN THROMBOSIS AND HEMOSTASIS 37(8):917-927 **IF=4.169** [Article]

Historically, humans have long sought to enhance their "athletic" performance to increase body weight, aggressiveness, mental concentration and physical strength, contextually reducing fatigue, pain, and improving recovery. Although regular training is the mainstay for achieving these targets, the ancillary use of ergogenic aids has become commonplace in all sports. The demarcation between ergogenic aids and doping substances or practices is continuously challenging and mostly based on perceptions regarding the corruption of the fairness of competition and the potential side effects or adverse events arising from the use of otherwise unnecessary ergogenic substances. A kaleidoscope of side effects has been associated with the use of doping agents, including behavioral, skeletal, endocrinologic, metabolic, hemodynamic, and cardiovascular imbalances. Among the various doping substances, the most striking association with thrombotic complications has been reported for androgenic anabolic steroids (i.e., cardiomyopathy, fatal and nonfatal arrhythmias, myocardial infarction [MI], intracardiac thrombosis, stroke, venous thromboembolism [VTE], limb arterial thrombosis, branch retinal vein occlusion, cerebral venous sinus thrombosis) and blood boosting (i.e., VTE and MI, especially for epoetin and analogs). The potential thrombotic complication arising from misuse of other doping agents such as the administration of cortisol, growth hormone, prolactin, cocaine, and platelet-derived preparations is instead speculative or anecdotal at best. The present article provides an overview on the epidemiological association as well as the underlying biochemical and biological mechanisms linking the practice of doping in sports with the development of

thrombosis.

**61) Lippi, G;** Favaloro, EJ (2011) [\*Antisense therapy in the treatment of hypercholesterolemia\*](#) EUROPEAN JOURNAL OF INTERNAL MEDICINE 22(6):541-546 **IF=1.657** [Review]

Cardiovascular disease, the leading causes of death worldwide, is a "preventable" pathology, so that accessible and affordable interventions should be established to target the leading risk factors, including hypercholesterolemia. Although statin based therapy is commonplace in primary and secondary prevention, several economical, clinical and safety issues have been raised, so that there is ongoing research into new, safer and more effective agents to be used alone or in combination with existing cardiovascular drugs. Antisense oligonucleotides (ASOs) are a class of short, single-stranded synthetic analogs of nucleic acids that bind to a target mRNA, preventing its translation and thereby inhibiting protein synthesis. Apolipoprotein B-100 (apoB-100) is the major protein moiety of the atherogenic lipoproteins LDL and Lp(a), thus representing the ideal target for antisense therapy. Two anti-apoB100 (i.e., ISIS 301012 and ISIS 147764) and one anti-apolipoprotein(a) (i.e., ASO 144367) have already been developed and tested in some animal and human trials, providing promising results in terms of significant reduction of both LDL and Lp(a). Nevertheless, some safety issues - especially injection-site reactions and potential hepatotoxicity - have also emerged, thereby slowing down the large clinical diffusion of these agents. The present article provides an update on clinical data regarding antisense therapy targeting human apolipoproteins, highlighting the benefits and the potential risks of this innovative therapeutic approach for hypercholesterolemia and hyperlipoproteinemia(a). (C) 2011 European Federation of Internal Medicine. Published by Elsevier B.V. All rights reserved.

**62) Lippi, G;** Favaloro, EJ (2011) [\*Laboratory diagnostics and appropriate care of people with haemophilia\*](#) HAEMOPHILIA 17(5):824-825 **IF=2.364** [Letter]

**63) Lippi, G;** Favaloro, EJ; Plebani, M (2011) [\*Direct-to-consumer testing: more risks than opportunities\*](#) INTERNATIONAL JOURNAL OF CLINICAL PRACTICE 65(12):1221-1229 **IF=2.309** [Review]

As a result of incessant genetic discoveries and remarkable technological advancements, the availability and the consequent consumers request for genetic testing are growing exponentially, leading to the development of a parallel market, i.e. the direct-to-consumer (DTC) testing, also known as direct access testing (DAT). Analogous to the traditional laboratory diagnostics, drawbacks of DTC testing might arise from any step characterising the total testing process, and include poor control of both appropriateness and preanalytical requirements, potential operation outside national or international regulation for in vitro diagnostic testing, little evidence of quality as well as the risk of transfer of genetic materials from the companies to other entities. Another important issue is the test panels offered to consumers, which are often based on preliminary, speculative or unsupported scientific information. Finally, the potential of this type of testing to generate anxiety or false reassurance should also be carefully considered. Although DTC testing carries some theoretical advantages (e.g. greater consumer autonomy and empowerment), solid clinical studies and costs vs. benefit analyses are needed to definitely establish whether DTC testing might be effective for decreasing the burden of diseases, delay their onset or modify their progression and therefore the clinical outcome.

**64) Lippi, G;** Franchini, M; Favaloro, EJ (2011) [\*Holiday Thrombosis\*](#) SEMINARS IN THROMBOSIS AND HEMOSTASIS 37(8):868-873 **IF=4.169** [Article]

The pathogenesis of acute thrombosis, either arterial or venous, is typically multifactorial and involves a variety of

factors that may be considered relatively "innocuous" when present alone. When someone is unlucky enough to accumulate several risk factors, compounded in many cases by one or more acute triggers, that person may be propelled over a threshold that precipitates the development of an acute episode of thrombosis. There is now reliable evidence that acute thromboses (both venous thromboembolism and acute coronary syndrome) follow a typical seasonal pattern and particularly display a characteristic spike during holiday periods. Overindulgence and abrupt changes of several lifestyle habits have been described as potential precipitating factors during such periods. Long travels, unhealthy diet, excessive or binge drinking and eating, decreased or increased physical activity, emotional and psychological stress, might all variably contribute to trigger an acute thrombotic event. Although the real causes of this "holiday phenomenon" remain speculative as yet, there is a widespread perception that they might represent preventable events like several other risk factors of both venous and arterial thrombosis. Beside drastic and unrealistic measures, such as canceling such holidays from the calendar, it seems reasonable to at least provide advice to patients about these "dangers," especially those individuals believed to be carrying a higher risk. Many (if not all) patients may ignore such advice and carry on regardless, but they should be given the benefit of informed choice.

**65) Lippi, G; Franchini, M; Targher, G (2011)** [\*Arterial thrombus formation in cardiovascular disease\*](#) NATURE REVIEWS CARDIOLOGY 8(9):502-512 **IF=7.467** [Review]

The pathogenesis of arterial thrombosis is complex and dynamic. Unlike venous thrombi, arterial thrombi typically form under conditions of high blood flow and are mainly composed of platelet aggregates, giving them the appearance of 'white clots'. Strong evidence suggests that arterial thrombi originate as a consequence of an injured atherosclerotic plaque, and that their formation involves the release of prothrombotic material (such as tissue factor), platelet aggregation, and platelet adhesion to the vascular wall. The initially labile platelet plaque is then stabilized by insoluble fibrin produced upon activation of the coagulation cascade. Inherited genetic factors (gene polymorphisms) and acquired predisposing conditions (such as the concentration and activity of clotting factors) can influence both the composition and the size of an arterial thrombus. Further research is needed to elucidate the functions of blood coagulation proteins and cellular elements that are critical to the pathogenesis of arterial thrombosis. This Review explains mechanisms of pathological arterial thrombus formation and discusses genetic and acquired risk factors of atherothrombosis.

**66) Lippi, G; Meschi, T; Cervellin, G (2011)** [\*Inflammatory biomarkers for the diagnosis, monitoring and follow-up of community-acquired pneumonia: Clinical evidence and perspectives\*](#) EUROPEAN JOURNAL OF INTERNAL MEDICINE 22(5):460-465 **IF=1.657** [Review]

Community-acquired pneumonia (CAP) is defined as an infection of the alveolar or gas-exchanging portions of the lungs occurring outside the hospital, with clinical symptoms accompanied by the presence of an infiltrate in the chest radiograph. Due to the high prevalence and the large demand of healthcare resources, an accurate clinical and therapeutic decision making is crucial in patients with CAP. As such, there is increasing interest on the use of traditional and innovative biomarkers such as procalcitonin (PCT) and C-reactive protein (CRP). At variance with other traditional inflammatory and innovative biomarkers, PCT might help limiting unnecessary antibiotic use, reduce bacterial resistance and decrease medical costs and drug-related adverse events. PCT however carries some additional advantages over CRP, such as the greater specificity for infections and a more narrow range of normal concentrations. (C) 2011 European Federation of Internal Medicine. Published by Elsevier B.V. All rights reserved.



**67) Lippi, G; Musa, R; Aloe, R; Mercadanti, M; Pipitone, S** (2011) [\*Influence of temperature and period of freezing on the generation of hemolysate and blood cell lysate\*](#) CLINICAL BIOCHEMISTRY 44(14-15):1267-1269 **IF=2.043** [Article]

Background: There is little information on temperature and period of freezing for generating hemolysate and blood cell lysate. Materials and methods: Primary tubes containing whole blood were frozen at -20 degrees C and -80 degrees C and then serially thawed to assess cell lysis and clinical chemistry tests in centrifuged plasma. Results and conclusions: Massive amount of blood cells lysis could only be obtained by storing samples 12 h at -20 degrees C, or 2 h at -80 degrees C. (C) 2011 The Canadian Society of Clinical Chemists. Published by Elsevier Inc. All rights reserved.

**68) Lippi, G; Plebani, M** (2011) [\*Athlete's biological passport: to test or not to test?\*](#) CLINICAL CHEMISTRY AND LABORATORY MEDICINE 49(9):1393-1395 **IF=2.069** [Editorial Material]

**69) Lippi, G; Sanchis-Gomar, F** (2011) [\*The health risks of acute exercise should also matter to internal medicine\*](#) EUROPEAN JOURNAL OF INTERNAL MEDICINE 22(6):E143-E143 **IF=1.657** [Letter]

**70) Lippi, G; Schena, F; Montagnana, M; Salvagno, GL; Banfi, G; Guidi, GC** (2011) [\*Significant variation of traditional markers of liver injury after a half-marathon run\*](#) EUROPEAN JOURNAL OF INTERNAL MEDICINE 22(5):E36-E38 **IF=1.657** [Article]

Background: While the promotion of health-related fitness is thereby widespread, less focus is currently being given on the biological influence that physical activity might exert on results of laboratory testing. As such, this study was undertaken to assess the kinetics of liver injury markers following physical exercise. Design and methods: Total and direct bilirubin as well as the activity of biochemical markers of liver injury including aspartate aminotransferase (AST), alanine aminotransferase (ALT), alkaline phosphatase (ALP), lactate dehydrogenase (LDH), gamma-glutamyl transpeptidase (GGT) and creatine kinase (CK), were measured before and after a half-marathon. Results: Significant increases occurred for GGT, AST, LDH, CK, total and direct bilirubin immediately after the run. AST, LDH, CK, total and direct bilirubin were still increased 24 h thereafter, whereas GGT decreased after 6 h. None of the athletes exceed the upper reference limit for ALT, ALP and GGT, whereas significant variations were instead observed for LDH, AST, CK, total and direct bilirubin. Conclusions: Taken together, the results of our prospective investigation clearly attest that an acute bulk of aerobic physical exercise, such as a half-marathon, might produce significant changes in the activity of traditional biomarkers of liver injury, which should be carefully considered when investigating physically active individuals undergoing laboratory testing. (C) 2011 European Federation of Internal Medicine. Published by Elsevier B.V. All rights reserved.

**71) Lombardi, G; Lanteri, P; Colombini, A; Lippi, G; Banfi, G** (2011) [\*Stability of Haematological Parameters and Its Relevance on the Athlete's Biological Passport Model\*](#) SPORTS MEDICINE 41(12):1033-1042 **IF=5.072** [Review]

The stability of haematological parameters is crucial to guarantee accurate and reliable data for implementing and interpreting the athlete's biological passport (ABP). In this model, the values of haemoglobin, reticulocytes and out-of-doping period (OFF)-score (Hb-60 root Ret) are used to monitor the possible variations of those parameters, and also to compare the thresholds developed by the statistical model for the single athlete on the basis of its personal values and the variance of parameters in the modal group. Nevertheless, a critical review of the current scientific literature dealing

with the stability of the haematological parameters included in the ABP programme, and which are used for evaluating the probability of anomalies in the athlete's profile, is currently lacking. In addition, we collected information from published studies, in order to supply a useful, practical and updated review to sports physicians and haematologists. There are some parameters that are highly stable, such as haemoglobin and erythrocytes (red blood cells [RBCs]), whereas others, (e.g. reticulocytes, mean RBC volume and haematocrit) appear less stable. Regardless of the methodology, the stability of haematological parameters is improved by sample refrigeration. The stability of all parameters is highly affected from high storage temperatures, whereas the stability of RBCs and haematocrit is affected by initial freezing followed by refrigeration. Transport and rotation of tubes do not substantially influence any haematological parameter except for reticulocytes. In all the studies we reviewed that used Sysmex instrumentation, which is recommended for ABP measurements, stability was shown for 72 hours at 4 degrees C for haemoglobin, RBCs and mean corpuscular haemoglobin concentration (MCHC); up to 48 hours for reticulocytes; and up to 24 hours for haematocrit. In one study, Sysmex instrumentation shows stability extended up to 72 hours at 4 degrees C for all the parameters. There are significant differences among methods and instruments: Siemens Advia shows lower stability than Sysmex as regards to reticulocytes. However, the limit of 36 hours from blood collection to analysis as recommended by ABP scientists is reasonable to guarantee analytical quality, when samples are transported at 4 degrees C and are accompanied by a certified steadiness of this temperature. There are some parameters that are highly stable, such as haemoglobin and RBCs; whereas others, such as reticulocytes, mean cell volume and haematocrit are more unstable. The stability of haematological parameters might be improved independently from the analytical methodology, by refrigeration of the specimens.

**72)** Luminari, S; Cesaretti, M; Tomasello, C; Guida, A; Bagni, B; Merli, F; Postiglione, R; Mangone, L; Versari, A; **Re, F**; De Lisi, V; **Ruffini, L; Ferretti, S**; Cuneo, A; Federico, M (2011) [\*Use of 2-\[\(18\)F\]fluoro-2-deoxy-D-glucose positron emission tomography in patients with Hodgkin lymphoma in daily practice: a population-based study from Northern Italy\*](#) LEUKEMIA & LYMPHOMA 52(9):1689-1696  
**IF=2.492** [Article]

**73)** Maffei, E; **Palumbo, A**; Martini, C; Tedeschi, C; Arcadi, T; La Grutta, L; Malago, R; Weustink, A; Mollet, N; De Rosa, R; Catalano, O; Salamone, I; Blandino, A; Midiri, M; Cademartiri, F (2011) [\*Computed tomography coronary angiography in asymptomatic patients\*](#) RADIOLOGIA MEDICA 116(8):1161-1173  
**IF=1.618** [Article]

This study assessed the accuracy of computed tomography coronary angiography (CT-CA) for detecting significant coronary artery disease (CAD; a parts per thousand yen50% lumen reduction) in intermediate/high-risk asymptomatic patients. A total of 183 consecutive asymptomatic individuals (92 men; mean age 54 +/- 11 years) with more than one major risk factor (obesity, hypertension, diabetes, hypercholesterolaemia, family history, smoking) and an inconclusive or nonfeasible noninvasive stress test result (stress electrocardiography, stress echocardiography, nuclear stress scintigraphy) underwent CT-CA in an outpatient setting. All patients underwent conventional coronary angiography (CAG) within 4 weeks. Data from CT-CA were compared with CAG regarding the presence of significant CAD (a parts per thousand yen50% lumen reduction). Mean calcium score was 177 +/- 432, mean heart rate during the CT-CA scan was 58 +/- 8 bpm and the prevalence (per-patient) of obstructive CAD was 19%. CT-CA showed single-vessel CAD in 9% of patients, two-vessel CAD in 9% and three-vessel CAD in 0%. Per-patient sensitivity, specificity, positive

predictive value and negative predictive value of CT-CA were 100% (90-100), 98% (96-99), 97% (85-99), 100% (97-100), respectively. Positive and negative likelihood ratios were 151 and 0, respectively. CT-CA is an excellent noninvasive imaging modality for excluding significant CAD in intermediate/ high-risk asymptomatic patients with inconclusive or nonfeasible noninvasive stress test.

**74) Maffei, E; Seitun, S; Palumbo, A; Martini, C; Emiliano, E; Cuttone, A; Aldrovandi, A; Malago, R; La Grutta, L; Midiri, M; Tedeschi, C; De Rosa, R; Catalano, O; Weustink, A; Mollet, N; Cademartiri, F (2011) [Prognostic value of Morise clinical score, calcium score and computed tomography coronary angiography in patients with suspected or known coronary artery disease](#) RADIOLOGIA MEDICA 116(8):1188-1202 IF=1.618 [Article]**

**75) Maggio, MG; Ceda, GP; Lauretani, F; Cattabiani, C; Avantageggiato, E; Morganti, S; Ablondi, F; Bandinelli, S; Dominguez, LJ; Barbagallo, M; Paolisso, G; Semba, RD; Ferrucci, L (2011) [Magnesium and anabolic hormones in older men](#) INTERNATIONAL JOURNAL OF ANDROLOGY 34(6):E594-E600 IF=3.601 [Article]**

Optimal nutritional and hormonal statuses are determinants of successful ageing. The age associated decline in anabolic hormones such as testosterone and insulin-like growth factor 1 (IGF-1) is a strong predictor of metabolic syndrome, diabetes and mortality in older men. Studies have shown that magnesium intake affects the secretion of total IGF-1 and increase testosterone bioactivity. This observation suggests that magnesium can be a modulator of the anabolic/catabolic equilibrium disrupted in the elderly people. However, the relationship between magnesium and anabolic hormones in men has not been investigated. We evaluated 399 =65-year-old men of CHIANTI in a study population representative of two municipalities of Tuscany (Italy) with complete data on testosterone, total IGF-1, sex hormone binding globulin (SHBG), dehydroepiandrosterone sulphate (DHEAS) and serum magnesium levels. Linear regression models were used to test the relationship between magnesium and testosterone and IGF-1. Mean age of the population was 74.18 +/- 6.43 (years +/- SD, age range 65.292.4). After adjusting for age, magnesium was positively associated with total testosterone (beta +/- SE, 34.9 +/- 10.3; p = 0.001) and with total IGF-1 (beta +/- SE, 15.9 +/- 4.8; p = 0.001). After further adjustment for body mass index (BMI), log (IL-6), log (DHEAS), log (SHBG), log (insulin), total IGF-1, grip strength, Parkinsons disease and chronic heart failure, the relationship between magnesium and total testosterone remained strong and highly significant (beta +/- SE, 48.72 +/- 12.61; p = 0.001). In the multivariate analysis adjusted for age, BMI, log (IL-6), liver function, energy intake, log (insulin), log (DHEAS), selenium, magnesium levels were also still significantly associated with IGF-1 (beta +/- SE, 16.43 +/- 4.90; p = 0.001) and remained significant after adjusting for total testosterone (beta +/- SE, 14.4 +/- 4.9; p = 0.01). In a cohort of older men, magnesium levels are strongly and independently associated with the anabolic hormones testosterone and IGF-1.

**76) Manzoni, GC; Bonavita, V; Bussone, G; Cortelli, P; Narbone, MC; Cevoli, S; D'Amico, D; De Simone, R; Torelli, P (2011) [Chronic migraine classification: current knowledge and future perspectives](#) JOURNAL OF HEADACHE AND PAIN 12(6):585-592 IF=2.015 [Review]**

In the field of so-called chronic daily headache, it is not easy for migraine that worsens progressively until it becomes daily or almost daily to find a precise and universally recognized place within the current international headache classification systems. In line with the 2006 revision of the second edition of the International Classification of

Headache Disorders (ICHD-2R), the current prevailing opinion is that this headache type should be named chronic migraine (CM) and be characterized by the presence of at least 15 days of headache per month for at least 3 consecutive months, with headache having the same clinical features of migraine without aura for at least 8 of those 15 days. Based on much evidence, though, a CM with the above characteristics appears to be a heterogeneous entity and the obvious risk is that its definition may be extended to include a variety of different clinical entities. A proposal is advanced to consider CM a subtype of migraine without aura that is characterized by a high frequency of attacks (10-20 days of headache per month for at least 3 months) and is distinct from transformed migraine (TM), which in turn should be included in the classification as a complication of migraine. Therefore, CM should be removed from its current coding position in the ICHD-2 and be replaced by TM, which has more restrictive diagnostic criteria (at least 20 days of headache per month for at least 1 year, with no more than 5 consecutive days free of symptoms; same clinical features of migraine without aura for at least 10 of those 20 days).

**77)** Marchesi, F; Pinna, F; **Cecchini, S; Sarli, L; Roncoroni, L** (2011) [\*Prospective Comparison of Laparoscopic Incisional Ventral Hernia Repair and Chevrel Technique\*](#) SURGICAL LAPAROSCOPY ENDOSCOPY & PERCUTANEOUS TECHNIQUES 21(5):306-310 **IF=1** [Article]

Purpose: Laparoscopic incisional hernia repair has become an attractive and widely adopted alternative to open procedures. The Chevrel technique is still frequently performed, owing to its safety and effectiveness. Our study prospectively compares the new and the old technique. Methods: We prospectively collected data from laparoscopic and open incisional ventral hernia repairs performed from January 2006 to December 2008. Twenty-one patients were ultimately enrolled in the open and 20 in the video-laparoscopic (VL) group for the statistical analysis. Results: Open and VL groups were homogeneous for demographics and size of parietal defect. No differences were observed in operating time and postoperative pain, although in the VL group, we found a tendency toward shorter hospital stays and higher postoperative quality of life. We reported a significantly higher rate of wound complications in the open group (7 vs. 1; P=0.03). Conclusions: Both techniques proved to be effective, although Chevrel presented a high rate of wound complications.

**78)** Mariani, S; Manfredini, E; Rosso, V; Mendez, MO; Bianchi, AM; Matteucci, M; **Terzano, MG**; Cerutti, S; (2011) [\*Characterization of A phases during the Cyclic Alternating Pattern of sleep\*](#) CLINICAL NEUROPHYSIOLOGY 122(10):2016-2024 **IF=2.786** [Article]

Objective: This study aims to identify, starting from a single EEG trace, quantitative distinctive features characterizing the A phases of the Cyclic Alternating Pattern (CAP). Methods: The C3-A2 or C4-A1 EEG leads of the night recording of eight healthy adult subjects were used for this analysis. CAP was scored by an expert and the portions relative to NREM were selected. Nine descriptors were computed: band descriptors (low delta, high delta, theta, alpha, sigma and beta); Hjorth activity in the low delta and high delta bands; differential variance of the EEG signal. The information content of each descriptor in recognizing the A phases was evaluated through the computation of the ROC curves and the statistics sensitivity, specificity and accuracy. Results: The ROC curves show that all the descriptors have a certain significance in characterizing A phases. The average accuracy obtained by thresholding the descriptors ranges from 59.89 (sigma descriptor) to 72.44 (differential EEG variance). Conclusions: The results show that it is possible to attribute a significant quantitative value to the information content of the descriptors. Significance: This study gives a mathematical confirm to the features of CAP generally described qualitatively, and puts the bases for the creation of automatic detection methods. (C) 2011 International Federation of Clinical Neurophysiology. Published by Elsevier

**79)** Mariscalco, G; Bruno, VD; Cottini, M; Borsani, P; Banach, M; Piffaretti, G; Dominici, C; **Beghi, C**; Sala, A (2011) [\*Optimal Timing of Discontinuation of Clopidogrel and Risk of Blood Transfusion After Coronary Surgery - Propensity Score Analysis\*](#) CIRCULATION JOURNAL 75(12):2805-2812 **IF=3.225** [Article]

**80)** Marshall, MR; **Fiaccadori, E** (2011) [\*Intermittent haemodialysis and acute kidney injury: the need for a standard nomenclature Reply\*](#) NEPHROLOGY DIALYSIS TRANSPLANTATION 26(11):3830-3831 **IF=3.564** [Letter]

**81)** **Medici, MC**; Abelli, LA; Guerra, P; **Dodi, I**; Dettori, G; **Chezzi, C** (2011) [\*Case Report: Detection of Rotavirus RNA in the Cerebrospinal Fluid of a Child With Rotavirus Gastroenteritis and Meningism\*](#) JOURNAL OF MEDICAL VIROLOGY 83(9):1637-1640 **IF=2.895** [Article]

Although case reports have described detection of rotavirus (RV) in extraintestinal sites such as the liver, kidney, and central nervous system (CNS) of children with RV gastroenteritis, CNS localization in RV infection seems to be rare. RT-PCR and nucleotide sequencing detected a G1P[8] strain in the stool and cerebrospinal fluid (CSF) samples of a patient with concurrent RV-associated enteritis and CNS signs. Upon sequence analysis, the viruses detected in the CSF was identical to the virus detected in the stools. In the VP7- and VP4-based phylogenetic dendograms the strain clustered within the G1-Ic sub-lineage and the P[8]-III lineage. This study supports the hypothesis that RV infection was able to spread from the intestinal tract to the CNS, and likely played a role in the onset of neurological disease. J. Med. Virol. 83: 16371640, 2011. (C) 2011 Wiley-Liss, Inc.

**82)** **Mercadanti, M**; **Romero, A**; **Lippi, G** (2011) [\*The Measurement of Hemoglobin A2 and F in Stored Whole Blood Samples\*](#) CLINICAL LABORATORY 57(41191):777-780 **IF=0.827** [Article]

Background: Little information is available on the influence of the storage conditions on the results of hemoglobin A2 (HbA2) and F (HbF) testing. Methods: The stability of HbA2 and HbF was assessed on stored whole blood samples tested immediately after collection and after one week of storage at either + 4 degrees C or - 80 degrees C. Results: An excellent correlation was observed between fresh specimens and those stored at either + 4 degrees C (HbA2: r = 0.994; p < 0.001 and HbF: r = 0.999; p < 0.001) or - 80 degrees C (HbA2: r = 0.995; p < 0.001 and HbF: r = 0.999; p < 0.001). The mean biases from the reference fresh specimens were very modest for samples stored at + 4 degrees C (HbA2: - 0.06 %; HbF: 0.02 (700 and - 80 degrees C (HbA2: - 0.06 %; HbF: 0.05 %). Conclusions: The results of our investigation demonstrate that whole blood specimens for HbA2 and HbF testing can be stored at + 4 degrees C or - 80 degrees C for up to one week. (Clin. Lab. 2011;57:777-780)

**83)** Mirandola, P; Gobbi, G; Masselli, E; Micheloni, C; Di Marcantonio, D; Queirolo, V; **Chiodera, P**; **Meschi, T**; Vitale, M (2011) [\*Protein Kinase C epsilon Regulates Proliferation and Cell Sensitivity to TGF-1 beta of CD4\(+\) T Lymphocytes: Implications for Hashimoto Thyroiditis\*](#) JOURNAL OF IMMUNOLOGY 187(9):4721-4732 **IF=5.745** [Article]

**84)** Montagnana, M; Danese, E; Giudici, S; Franchi, M; Guidi, GC; Plebani, M; **Lippi, G** (2011) [\*HE4 IN OVARIAN CANCER: FROM DISCOVERY TO CLINICAL APPLICATION\*](#) ADVANCES IN CLINICAL CHEMISTRY, VOL 55 55():1-20 **IF=3.263** [Review]

Despite the relatively low prevalence, ovarian cancer is the fifth leading cause of death from cancer among women. As such, an early diagnosis for establishing a timely surgical and/or chemotherapeutic treatment is essential for improving the outcome. The most reliable, but not always straightforward, approach to diagnose ovarian cancer relies on multiple, time-consuming and expensive investigative tools. These typically include clinical presentation (i.e., pelvic or abdominal pain, urinary frequency or urgency, increased abdominal size or bloating) with pelvic examination, transvaginal ultrasonography (US), and measurement of carbohydrate antigen 125 (CA125). Although the conventional pathway to develop and market a clinically useful biomarker is challenging, recent advances in genomic and proteomic technologies have led to the identification of previously unknown candidate markers of ovarian cancer. Some of these are currently under clinical validation. The human epididymis protein 4 (HE4) has recently been approved by the Food and Drug Administration for monitoring recurrence or progression of epithelial ovarian cancer. Nevertheless, reliable clinical evidence demonstrates that HE4, used alone or in combination with CA125, substantially improves the accuracy of screening and/or disease monitoring. This chapter will review the current knowledge on biologic and clinical applications of ovarian cancer biomarkers, with particular emphasis on the newly proposed marker, HE4.

**85)** Montagnana, M; **Meschi, T; Borghi, L; Lippi, G** (2011) [\*Thrombosis and Occlusion of Vascular Access in Hemodialyzed Patients\*](#) SEMINARS IN THROMBOSIS AND HEMOSTASIS 37(8):945-953 **IF=4.169** [Article]

Patients undergoing chronic hemodialysis have a high risk of arterial thrombotic events as well as vascular access thrombosis (VAT). The latter complication has been consistently associated with inherited (i.e., the prothrombin 20210 polymorphism, and polymorphisms in the genes encoding for transforming growth factor-beta 1, nitric oxide synthase, plasminogen activator inhibitor-1, angiotensin converting enzyme, and methylene tetrahydrofolate reductase), and acquired thrombotic risk factors (i.e., diabetes, obesity, atrial fibrillation, hypertension, hyperhomocysteinemia, hyperlipoproteinemia(a), low serum albumin, antiphospholipid antibodies, autoantibodies against protein C and S, erythropoietin administration, malnutrition, and cytomegalovirus infection). The three main factors involved in the pathogenesis of VAT overlap those of venous thrombosis and therefore include endothelial cell injury, blood stasis, and hypercoagulability. These changes are characteristic of patients affected by end-stage renal disease and might be further aggravated during and after hemodialysis. The aim of this review is to describe the epidemiology and pathogenesis of thrombosis of dialysis vascular access and to discuss the application of therapeutic interventions in prevention and treatment of this clinical problem

**86)** Montillo, M; Tedeschi, A; Petrizzi, VB; Ricci, F; **Crugnola, M**; Spriano, M; Spedini, P; Ilariucci, F; Uziel, L; Attolico, I; Vismara, E; De Blasio, A; Zaccaria, A; Morra, E (2011) [\*An open-label, pilot study of fludarabine, cyclophosphamide, and alemtuzumab in relapsed/refractory patients with B-cell chronic lymphocytic leukemia\*](#) BLOOD 118(15):4079-4085 **IF=10.558** [Article]

**87)** Mormile, R; Vittori, G; De Michele, M; Squarcia, U; **Quaini, F** (2011) [\*Is telomerase the final downstream effector of the escape of cardiomyocytes from the point-of-no-return of apoptosis in infants of diabetic mothers?\*](#) INTERNATIONAL JOURNAL OF CARDIOLOGY 151(3):378-379 **IF=6.802** [Letter]



**88)** Ohlsson, C; Wallaschofski, H; Lunetta, KL; Stolk, L; Perry, JRB; Koster, A; Petersen, AK; Eriksson, J; Lehtimäki, T; Huhtaniemi, IT; Hammond, GL; **Maggio, MG**; Coviello, AD; Ferrucci, L; Heier, M; Hofman, A; Holliday, KL; Jansson, JO; Kahonen, M; Karasik, D; Karlsson, MK; Kiel, DP; Liu, YM; Ljunggren, O; Lorentzon, M; Lyytikäinen, LP; Meitinger, T; Mellström, D; Melzer, D; Miljkovic, I; Nauck, M; Nilsson, M; Penninx, B; Pye, SR; Vasan, RS; Reincke, M; Rivadeneira, F; Tajar, A; Teumer, A; Uitterlinden, AG; Ulloor, J; Viikari, J; Volker, U; Volzke, H; Wichmann, HE; Wu, TS; Zhuang, WV; Ziv, E; Wu, FCW; Raitakari, O; Eriksson, A; Bidlingmaier, M; Harris, TB; Murray, A; De Jong, FH; Murabito, JM; Bhasin, S; Vandenput, L; Haring, R (2011) [\*Genetic Determinants of Serum Testosterone Concentrations in Men\*](#) PLOS GENETICS 7(10):- **IF=9.543** [Article]

**89)** Patrelli, TS; D'Addetta, F; Gizzo, S; Franchi, L; Di Gangi, S; Sianesii, N; Peri, F; Pedrazzi, G; **Berretta, R; Piantelli, G**; Lukanovic, A; Nardelli, GB; **Modena, AB** (2011) [\*Correlation between fetal movement revealed in actography and fetal-neonatal well-being: observational study on 3,805 pregnancies followed in a Northern Italy tertiary care hospital\*](#) CLINICAL AND EXPERIMENTAL OBSTETRICS & GYNECOLOGY 38(4):382-385 **IF=0.433** [Article]

Purpose of investigation: To evaluate the correlation between fetal movement revealed in cardiotocography and fetal-neonatal well-being as well as to assess the value of cardiotocography in our clinical practice. Methods: Retrospective analysis of 3,805 pregnancies followed at Parma General Hospital. Exclusion criteria were cesarean section, preterm delivery, and stillbirth. We analyzed the predictive power of actography during the dilating and expulsive phases of labor by establishing a correlation between number of fetal movements and our neonatal indexes of well being, i.e., cardiotocographic score, Apgar index and neonatal pH value. Statistical tests used were Fisher's test, chi-square test (X(2)), Pearson correlation and Spearman Rho; p value was considered significant if it was less than 0.05. Results: We considered 2,389 vaginal deliveries. Analyzing the correlation between fetal movement and cardiotocographic score in the two different phases of labor, the comparison among subpopulations identified by different cardiotocograph scores revealed no statistical difference. Conclusion: Cardiotocography is reconfirmed as a good instrument to evaluate neonatal outcome, while actigraphy cannot be used alone to define fetal well-being, mainly due to the inability to standardize assessment of the actographic study.

**90)** Pela, G; Pattoneri, P; Passera, M; Calzi, ML; Goldoni, M; Tirabassi, G; **Montanari, A** (2011) [\*Normotensive Male Offspring of Essential Hypertensive Parents Show Early Changes in Left Ventricular Geometry Independent of Blood Pressure\*](#) ECHOCARDIOGRAPHY-A JOURNAL OF CARDIOVASCULAR ULTRASOUND AND ALLIED TECHNIQUES 28(8):821-828 **IF=1.415** [Article]

For the purpose of detecting early left ventricle (LV) abnormalities in normotensive offspring of hypertensive parents (EH+), 23 normotensive sedentary male EH+ (age 25 +/- 3 years) and 20 matched offspring of normotensive families (EH-), underwent: clinic blood pressure (BP) measurement, 24-hour ambulatory BP monitoring (ABPM), frequency-domain parameters of autonomic heart rate control and conventional and Doppler tissue echocardiographic (DTE) study of both ventricles, including relative wall thickness (RWT) as an index of LV remodeling. EH+ subjects had slightly higher office systolic and diastolic (P < 0.05), average 24-hour systolic (P < 0.001), diastolic (P < 0.01), and mean BP (P < 0.05). No between-group differences were detected for heart rate variability, LV mass and systolic and diastolic

function in both ventricles. RWT was greater in EH+ (0.38 +/- 0.05 vs. 0.34 +/- 0.03 SD;  $P < 0.01$ ), which was significantly related, at the univariate analysis, to the condition of EH+ ( $P < 0.004$ ) and to the clinic and ambulatory BP parameters as well ( $P = 0.06-0.01$ ). However, at the stepwise multiple regression analysis, with RWT used as the dependent variable, only the condition of EH+ was independently associated with RWT ( $P < 0.008$ ), whereas BP did not. RWT, according to receiver operating characteristic curves analysis, predicted the condition of EH+ (cutoff point 0.369, specificity 90%, sensitivity 65%). Our data suggest that an higher RWT, as an index towards LV concentric remodeling, is the earliest change in LV geometry in EH+ subjects, independent of any slight elevation in BP. Thus, RWT measurement may be a quite specific tool to detect early LV alterations due to the condition of EH+.

(Echocardiography 2011;28:821-828)

**91)** Pennacchia, I; Gasbarra, R; Manente, L; Pisa, R; Garcovich, S; **Ricci, R**; Ruggeri, C; Massi, G (2011) [\*Polypoid Spitz nevus: two cases evaluated with genetic technique, prolonged follow up, and sentinel lymph node biopsy\*](#) JOURNAL OF CUTANEOUS PATHOLOGY 38(9):747-752 **IF=1.744** [Article]

**92)** Picetti, E; Mergoni, M (2011) [\*Traumatic Diaphragmatic Hernia\*](#) NEW ENGLAND JOURNAL OF MEDICINE 365(14):E30-E30 **IF=53.484** [Editorial Material]

**93)** Plebani, M; Sciacovelli, L; **Lippi, G** (2011) [\*Quality indicators for laboratory diagnostics: consensus is needed\*](#) ANNALS OF CLINICAL BIOCHEMISTRY 48():479-479 **IF=2.209** [Letter]

**94)** Poryazova, R; Werth, E; **Parrino, L**; **Terzano, MG**; Bassetti, CL (2011) [\*Cyclic alternating pattern in narcolepsy patients and healthy controls after partial and total sleep deprivation\*](#) CLINICAL NEUROPHYSIOLOGY 122(9):1788-1793 **IF=2.786** [Article]

**95)** Ravindran, RD; Vashist, P; Gupta, SK; Young, IS; Maraini, G; **Camparini, M**; Jayanthi, R; John, N; Fitzpatrick, KE; Chakravarthy, U; Ravilla, TD; Fletcher, AE (2011) [\*Inverse Association of Vitamin C with Cataract in Older People in India\*](#) OPHTHALMOLOGY 118(10):1958-1965 **IF=5.017** [Article]

**96)** Rossi, E; **Regolisti, G**; Perazzoli, F; Negro, A; Grasselli, C; Santi, R; Cavalieri, S; Belloni, L; Gemelli, G; Della Valle, E; Miotto, D (2011) [\*Intraprocedural Cortisol Measurement Increases Adrenal Vein Sampling Success Rate in Primary Aldosteronism\*](#) AMERICAN JOURNAL OF HYPERTENSION 24(12):1280-1285 **IF=3.129** [Article]

Background Adrenal venous sampling (AVS) is the gold standard for the identification of unilateral primary aldosteronism (PA), but is technically difficult. The aim of our study was to assess whether intraprocedural cortisol measurement (IPCM) increases AVS success rate. Methods Twenty-five consecutive PA patients underwent cosyntropin-stimulated AVS. Cortisol was measured immediately in a first set of samples drawn from adrenal veins and inferior vena cava. The selectivity criterion was an adrenal vein-to-inferior vena cava cortisol ratio  $\geq 5$ . If bilateral selectivity was not achieved in a first set of samples, a second set was obtained during the same radiological session. PA was judged as unilateral if the gradient of cortisol-corrected aldosterone between dominant and nondominant side was  $>3.5$ . Twenty-five consecutive PA patients who had previously been submitted to AVS without IPCM served as historical controls. Lateralizing patients who underwent unilateral adrenalectomy were followed for 2 years after

surgery. Results Bilateral selectivity using IPCM was achieved in 19/25 patients in the first set of samples, and in an additional four cases in the second set (92% vs. 76%;  $P = 0.06$ ). The final rate of bilateral selectivity was higher than that obtained in the historical series (23/25 vs. 16/25,  $P = 0.04$ ), whereas bilateral selectivity in the first set of samples was not different from that achieved in the historical series. Nineteen lateralizing patients (13 of the present series, six of the historical series) were submitted to adrenalectomy, resulting in reversal of PA. Conclusions IPCM increases the success rate of AVS.

**97) Sverzellati, N; Devaraj, A; Desai, SR; Quigley, M; Wells, AU; Hansell, DM (2011) [Method for Minimizing Observer Variation for the Quantitation of High-Resolution Computed Tomographic Signs of Lung Disease](#) JOURNAL OF COMPUTER ASSISTED TOMOGRAPHY 35(5):596-601 IF=1.358 [Article]**

Objectives: This study aimed to describe a method of reducing interobserver variation associated with the visual quantitation of high-resolution computed tomographic (HRCT) signs of airways and interstitial lung disease (ILD). Methods: The HRCT scans of 2 cohorts of patients with airways disease ( $n = 144$ ) and ILD ( $n = 109$ ) were evaluated by 2 observers. Selected signs of airways disease were evaluated: (1) bronchial wall thickness and (2) the extent of the decreased attenuation. In the ILD group, the total extent of disease was scored. These 3 HRCT signs were scored by 2 observers independently using a standard method. The observers rescored the CT scans with a new scoring system (continuous learning method, CLM). Results: Observer agreement for CT signs was superior for CLM: bronchial wall thickness kappa(w) increased from 0.51 to 0.76; for decreased attenuation, kappa(w) increased from 0.34 to 0.81; and for ILD extent, kappa(w) increased from 0.53 to 0.87. Conclusions: The CLM reduces noise from observer variation in studies that require visual quantitation of HRCT signs of lung disease.

**98) Tardito, S; Chiu, M; Uggeri, J; Zerbini, A; Da Ros, F; Dall'Asta, V; Missale, G; Bussolati, O (2011) [L-Asparaginase and Inhibitors of Glutamine Synthetase Disclose Glutamine Addiction of beta-Catenin-Mutated Human Hepatocellular Carcinoma Cells](#) CURRENT CANCER DRUG TARGETS 11(9):929-943 IF=4.771 [Review]**

**99) Tiseo, M; Gelsomino, F; Bartolotti, M; Bordi, P; Bersanelli, M; Rossi, G; Ardizzoni, A (2011) [Anaplastic lymphoma kinase as a new target for the treatment of non-small-cell lung cancer](#) EXPERT REVIEW OF ANTICANCER THERAPY 11(11):1677-1687 IF=2.976 [Review]**

The anaplastic lymphoma kinase (ALK) gene rearrangement identifies a distinct molecular subset in non-small-cell lung cancer (NSCLC) populations susceptible to targeted inhibition. It consists of a small inversion in the short arm of chromosome 2 between exon 20 of the ALK gene and different exons of the echinoderm microtubule-associated protein-like (EML4) gene. This translocation leads to a chimeric protein with constitutive activation of ALK that possesses an oncogenic activity demonstrated both in vitro and in vivo. Other rare translocation partners for ALK other than EML4 may be found in lung cancers, including TRK-fused gene (TFG) and kinesin family member 5B (KIF5B). ALK-positive patients represent 5-6% of all NSCLCs and they seem to have particular clinicopathological and molecular features. Recently, Phase I-II trial results of crizotinib, a potent dual c-MET and ALK inhibitor, demonstrated its dramatic efficacy in ALK-positive patients with advanced NSCLC. This article will present knowledge on the characteristics of ALK-positive patients, discuss the different methods of ALK rearrangement detection and focus on

clinical results of crizotinib.

**100) Turrone, F; Foroni, E; Serafini, F; Viappiani, A; Montanini, B; Bottacini, F; Ferrarini, A; Bacchini, PL; Rota, C; Delledonne, M; Ottonello, S; van Sinderen, D; Ventura, M (2011) [Ability of Bifidobacterium breve To Grow on Different Types of Milk: Exploring the Metabolism of Milk through Genome Analysis](#) APPLIED AND ENVIRONMENTAL MICROBIOLOGY 77(20):7408-7417 IF=3.778 [Article]**

**101) Tzani, P; Aiello, M; Elia, D; Boracchia, L; Marangio, E; Olivieri, D; Clini, E; Chetta, A (2011) [Dynamic hyperinflation is associated with a poor cardiovascular response to exercise in COPD patients](#) RESPIRATORY RESEARCH 12():- IF=0 [Article]**

Background: Pulmonary hyperinflation has the potential for significant adverse effects on cardiovascular function in COPD. The aim of this study was to investigate the relationship between dynamic hyperinflation and cardiovascular response to maximal exercise in COPD patients. Methods: We studied 48 patients (16F; age 68 yrs +/- 8; BMI 26 +/- 4) with COPD. All patients performed spirometry, plethysmography, lung diffusion capacity for carbon monoxide (TLco) measurement, and symptom-limited cardiopulmonary exercise test (CPET). The end-expiratory lung volume (EELV) was evaluated during the CPET. Cardiovascular response was assessed by change during exercise in oxygen pulse (Delta O(2)Pulse) and double product, i. e. the product of systolic blood pressure and heart rate (DP reserve), and by the oxygen uptake efficiency slope (OUES), i. e. the relation between oxygen uptake and ventilation. Results: Patients with a peak exercise EELV (% TLC) >= 75% had a significantly lower resting FEV(1)/VC, FEV(50)/FIF(50) ratio and IC/TLC ratio, when compared to patients with a peak exercise EELV (% TLC) < 75%. Dynamic hyperinflation was strictly associated to a poor cardiovascular response to exercise: EELV (% TLC) showed a negative correlation with Delta O(2)Pulse (r = -0.476, p = 0.001), OUES (r = -0.452, p = 0.001) and DP reserve (r = -0.425, p = 0.004). Furthermore, according to the ROC curve method, Delta O(2)Pulse and DP reserve cut-off points which maximized sensitivity and specificity, with respect to a EELV (% TLC) value >= 75% as a threshold value, were <= 5.5 mL/bpm (0.640 sensitivity and 0.696 specificity) and <= 10,000 Hg . bpm (0.720 sensitivity and 0.783 specificity), respectively. Conclusion: The present study shows that COPD patients with dynamic hyperinflation have a poor cardiovascular response to exercise. This finding supports the view that in COPD patients, dynamic hyperinflation may affect exercise performance not only by affecting ventilation, but also cardiac function.

**102) Valentino, M; Bertolotto, M; Derchi, L; Bertaccini, A; Pavlica, P; Martorana, G; Barozzi, L (2011) [Role of contrast enhanced ultrasound in acute scrotal diseases](#) EUROPEAN RADIOLOGY 21(9):1831-1840 IF=3.594 [Article]**

To evaluate the efficacy of contrast-enhanced ultrasound (CEUS) in patients with acute scrotal pain not defined at ultrasound (US) with colour Doppler . CEUS was carried out in 50 patients with acute scrotal pain or scrotal trauma showing testicular lesion of undefined nature at US. The accuracy of US and CEUS findings versus definitive diagnosis (surgery or follow-up) was calculated. Twenty-three patients had a final diagnosis of testicular tumour, three abscess, eight focal infarction, seven trauma, three testicular torsion, one haematoma. Five patients were negative. Thirty-five patients were operated (23 testicular tumours, six trauma, three testicular torsion, one abscess, one focal infarction, and one haematoma) and 15 underwent medical treatment or were discharged. US provided a definitive diagnosis in 34/50 as compared to the 48/50 patients diagnosed at CEUS. Sensitivity and specificity were 76% and 45% for US and 96% and 100% for CEUS respectively. CEUS was more accurate in the final diagnosis compared to US, potentially reducing

the need for further imaging. In particular CEUS can be proposed in emergency in cases where US diagnosis remains inconclusive, namely in infarction, and trauma, when testicular torsion cannot be ruled out, and in identifying testicular mass.

**103)** Vottero, A; **Minari, R; Viani, I;** Tassi, F; Bonatti, F; **Neri, TM;** Bertolini, L; **Bernasconi, S;** Ghizzoni, L (2011) [\*Evidence for Epigenetic Abnormalities of the Androgen Receptor Gene in Foreskin from Children with Hypospadias\*](#) JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM 96(12):E1953-E1962 **IF=6.495** [Article]

Context: Hypospadias is a malformation of the penis due to an incomplete development of the male urethra, the exact etiology of which in the majority of cases remains unknown. Objective: The objective of the study was to assess whether defects of the androgen receptor (AR) gene (CAG repeats and methylation pattern) and DNA methyltransferases (DNMT) family are present in hypospadias patients. Design: CAG repeats length, methylation status, and expression of the AR gene were analyzed. The DNMT family was studied at the protein level and the DNMT3A sequenced. Setting: The study was performed at a pediatric endocrinology referral clinic. Patients or Other Participants: Twenty boys with isolated glandular hypospadias and 20 age-matched control children undergoing a surgical procedure for circumcision were studied. Main Outcome Measure(s): CAG repeats length and AR methylation pattern in PBLs and foreskin tissue, DNMT expression and sequencing in patients and controls, and in vitro studies in cultured fibroblasts were measured. Results: AR gene methylation in foreskin tissues from patients with hypospadias was higher than in normal children. AR expression in foreskin tissue of hypospadias patients was lower than in controls, whereas the DNMT3A protein level was significantly higher in patients than controls. In cultured fibroblasts, both dihydrotestosterone and testosterone significantly reduced AR gene methylation and DNMT3A expression in a dose-dependent fashion and increased AR expression. Conclusion: The AR gene in target tissues from patients with hypospadias is more methylated than in control children, resulting in a decreased expression of the AR. The mechanism underlying the modulation of the AR gene expression seems to be mediated by DNMT3A. This epigenetic alteration of the AR gene might be involved in the pathogenesis of hypospadias. (J Clin Endocrinol Metab 96: E1953-E1962, 2011)

**104)** Zasa, M; **Vezzani, A** (2011) [\*Should we revise out-of-hospital rewarming following successful CPR in pediatric drowning victims?\*](#) MINERVA ANESTESIOLOGICA 77(10):1024-1024 **IF=2.581** [Letter]

**105)** Zwerina, J; Bach, C; **Martorana, D;** Jatzwauk, M; Hegasy, G; Moosig, F; Bremer, J; Wiczorek, S; Moschen, A; Tilg, H; Neumann, T; Spriewald, BM; Schett, G; Vaglio, A (2011) [\*Eotaxin-3 in Churg-Strauss syndrome: a clinical and immunogenetic study\*](#) RHEUMATOLOGY 50(10):1823-1827 **IF=4.171** [Article]