FIZIOLOGIA (PHYSIOLOGY) 2008; vol.18, nr. 1(57)

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1. REVIEW: THE PSYCHOANALYTICAL THEORIES FROM A NEUROSCIENTIFIC PERSPECTIVE

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ABSTRACT
The perspectives of a realistic and fruitful dialogue between the psychoanalytical concept and the neurosciences remain controversial. This problem has been treated also by us (Derevenco, 1994); newer issues justify to revise this topic. Several sharp critics of psychoanalysis keep up a vehement polemic and counter any scientific value of this concept. On the other hand some outstanding scientists think that many of Freud's theoretical constructs could be integrated in the contemporary developments of neurobiology. A champion of this view is Eric Kandel. He considers "that a unified discipline of neurobiology, cognitive psychology, and psychoanalysis would forge a new and deeper understanding of mind". A part of the main components of psychoanalysis can be studied by a neuroscientific methodology. For instance, several investigations aiming to explore the neurobiological basis of cognitive unconsciousness resort to cerebral imagery. The psycho-neuro-endocrinology of sexuality, with its gender differences and infancy peculiarities is in progress; the nowadays investigations of dreams, and memory allow new interpretations. A topic of interest of the connection between psychodynamic and biological factors concerns stress, particularly its mnestic processes, the role of limbic system, the posttraumatic

stress disorder, and the therapeutic interventions. Despite the difficulties to achieve a through convergence proposed by Kandel the dialogue between the neurosciences and psychoanalysis is beneficial for both disciplines.
Key words: psychoanalysis, neuroscience, unconsciousness, sexuality, dreams, memory, stress

2. REVIEW: NORMAL AND PATHOLOGIC INVOLVEMENT OF COPPER IONS IN CENTRAL NERVOUS SYSTEM

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ABSTRACT
Copper is a bivalent metal with lots of action at cerebral level. An important number of enzymes which are essential for neurotransmitter metabolism are dependent on copper. Copper is also involved in allosteric modulation of some receptor systems (e.g. P_{2x} receptors). In case of several neurodegenerative diseases (such as Alzheimer and Wilson disease etc), misbalances of this cation homeostasis are considered a key element of the pathogenic mechanisms. Copper deficiency of associated with some prionic encephalopaties. Other cerebral pathological states, such as opiate addiction are not significantly influenced by this cation. The multiple actions of copper, as well as of other bivalent cations in the functioning of central nervous system strongly states that metaloneurobiology should be considered an important branch of medicine and biology and it opens perspectives to new therapies.
Keywords: copper, pharmacodependence, neurodegenerative disease, metaloneurobiology

3. REVIEW: STEM CELLS IN CUTANEOUS EPITHELIUM

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ABSTRACT
Self-renewal of human epithelial stem cells versus their commitment to differentiation and/or cancer development are closely linked (17). Understanding this process is of great potential impact for new therapeutic approaches to human tumors, which are mostly of epithelial origin (16). Keratinocytes provide an attractive experimental system to study the connection between growth/differentiation potential of epithelial cells and transformation. The multipotential nature and developmental flexibility of adult cutaneous epithelial cells have been well documented, and reflect the high demands that nature has placed on a tissue with a relatively invariant architecture.
Key words: epithelial stem cells, skin, keratinocytes, hair follicle, markers

4. CORRELATIONS BETWEEN ANGIOGENESIS AND MEAN TUMOR DIAMETER, USEFUL AS PROGNOSTIC FACTORS IN RENAL CELLS CARCINOMA

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ABSTRACT
Angiogenesis represents one of the most important factors of the tumor proliferation. An intense neovascularization allows a tumoral expansion, and the diminishing of this process reduces or even stops neoplastic growth. The significance of angiogenesis in tumoral growth varies as an intense microvascularization is highly suggestive for a sever prognosis though other researchers do not consider it of prognostic importance. Knowing numerous quantification systems of tumor angiogenesis we used a simple one, the appreciation of the relative microvascular density. We used angiogenesis and tumoral dimension as prognosis factors in renal cell carcinoma.
Key words: angiogenesis, renal carcinoma, tumor dimension, microvascular density

5. ERYTHROPOIETIN RESPONSIVENESS IN CHRONIC HEMODIALYSYS PATIENTS WITH LOW VALUES OF ERYTHROCYTE SUPEROXID DISMUTASE

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ABSTRACT
It was postulated that chronic hemodialysis patients have enhanced oxidative stress and a variety of tissue damages are due to free oxygen species. The aim of this study was to examine de relationship between markers of oxidative stress and erythropoietin responsiveness in chronic hemodilaysis patients. 65 chronic hemodialysis patients treated with erythropoietin and 21 healthy volunteers were included. Malonyldialdehide, carbonyl proteins, erythrocyte superoxid dismutase (SOD), ceruloplasmin and serum antioxidant capacity were measured. Erythropoietin doses were noted and erythropoietin responsiveness index was calculated. Chronic hemodialysis patients had high values of malonyldialdehide and carbonyl proteins and low levels of ceruloplasmin and SOD and as compared to the controls. A positive correlation between SOD and initial hemoglobin was found as well as between SOD and erythropoietin responsiveness. Moreover, patients with normal values of SOD required lower doses of erythropoietin and maintained a stable hemoglobin after tree month of follow as compared with patients with low values of SOD who significantly decreased their hemoglobin and required higher doses of erythropoietin. We concluded that low levels of erythrocyte SOD correlates with low hemoglobin, high doses of erythropoietin and erythropoietin hyporesponsiveness in chronic hemodialysis patients.
Keywords: oxidative stress, erythrocyte superoxid dismutase, anemia, erythropoietin responsiveness, chronic hemodialysis patients

6. THE EVOLUTION OF ANTIOXIDANT ERYTHROCYTE ENZYMES IN HEMODIALYZED PATIENTS

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ABSTRACT
In chronic kidney diseases, after initiating haemodialysis there is an imbalance bee twin the production of reactive oxygen species and antioxidant defence mechanism. Haemodialysis influences the evolution of antioxidant erythrocyte enzymes.
The aim of the study is to evaluate the levels of antioxidant erythrocyte enzymes on hemodialyzed patients (HD), their evolution in time, before and after haemodialysis session.
The study was designed to evaluated the activities of superoxide dismutase (SOD) and glutathione peroxidase (GPx) in 70 haemodialized patients-group A and 30 healthy volunteers –group B. After one year we investigated the same antioxidant enzymes on distinct group of 30 haemodialized patients from group A, before and after hemodialisis. In HD patients-group A were found enhanced activities of both enzymes SOD (1514 ± 392.35 vs 1261.14 ± 124.48, p = 0.0012) as well as GPx (4146 ± 18.8 vs 716 ± 15.43, p = 0.004) compared with group B. After one year, both of enzymes levels were lower compared with the first levels, from the beginning of the study (1514 ± 392.35 vs1353 ± 485.93 p = 0.07) respectively (66.8 ± 18.82 vs 43.9 ± 21.89 p = 0.003).There were significant differences in the levels of antioxidant enzymes before and after hemodialysis (1353 ± 485.93 vs 1120 ± 335.72 p = 0.0006) respectively (43.9 ± 21.89 vs 38.5 ± 12.03 p = 0.02).
Key words: hemodialysis, oxidative stress, antioxidant erythrocyte enzymes

7. STUDY ON ETHICAL ISSUES APPROACH IN THE RESEARCH PROJECTS OF UMFVBT

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ABSTRACT
This study aimed to identify current ethical issues in the research projects conducted by the researchers of the Victor Babes University of Medicine and Pharmacy Timisoara. We have used the Delphi technique as research design, constructing a panel of 30 researchers who answered three questionnaires. Consensus lists on three main ethical aspects were defined: ethical issues on human subjects use for research, ethical issues on animal use for research, professional ethical issues. Given that this study might have been omitted some ethical aspects important in the practice, further studies on each of the above mentioned issues should be conducted.
Key words: bioethics, research ethics, Delphi technique, questionnaire design

8. KLEBSIELLA PNEUMONIAE STRAINS ISOLATED FROM NOSOCOMIAL URINARY TRACT INFECTIONS

Muntean D, Licker M, Berceanu-Vaduva D, Hogea E, Dragomirescu L, Pilut C, Popa M, Craciunescu M, Dugaesescu D, Horhat F, Serban D, Lacatus R, Moldovan R
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ABSTRACT
Aims: The aim of our study was to determine the prevalence of *Klebsiella pneumoniae* strains, isolated from patients hospitalized in Urology Department, and their resistance patterns.
Methods: Identification of germs was performed by the API system (ID 32 E) and susceptibility tests by disk-diffusion tests (Kirby-Bauer) and the API system (ATB G- 5) too. For ESBL producing strains we also used disk synergy tests. Results: From 1231 urines samples we isolated 126 microbial strains with nosocomial potential, from which, 56 strains (44.44%) were *Klebsiella pneumoniae*. The highest percentage was noticed in the case of ESBL producing *Klebsiella pneumoniae* (54 from 56 strains). All

these strains associated other resistance phenotypes as well. Conclusions: The high prevalence of ESBL producing *Klebsiella pneumoniae* strains is explained by prolonged antibiotic therapy of patients with invasive diagnostic and therapeutic procedures.
Keywords: urocultures, resistance phenotype, *Klebsiella pneumoniae*

9. ENDOTHELIAL DYSFUNCTION IN RELATIONSHIP WITH ENDOTELIN-1 AND LIPID PARAMETERS IN HYPERTENSION PATIENTS

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ABSTRACT
Endothelin-1 (ET-1) is a potent vasoconstrictor peptide originally isolated from endothelial cells and it is an important factor in the development of vascular dysfunction and cardiovascular disease. The aim of this study was to evaluate non-invasive endothelial dysfunction in patients with hypertension and to characterize some specific factors which can contribute to its appearance. The study was done on 78 subjects with hypertension. The mean age of the patients was 57.16 ± 9.69 years. Total cholesterol, triglycerides, HDL-C and LDL-C were determined in all patients. The endothelial function was quantified by flow mediated dilation (FMD) on brachial artery, using B – mode ultrasonography and by determination of endothelin-1 using Enzyme Immunometric Assay (EIA). The mean value for FMD was 8.00 % ± 3 % and the mean value for ET-1 was 14.36 pg/ml, between them we observed a moderate correlation ($r = -0,471$, $p < 0.05$). We found a weak but statistical significant association between and diastolic arterial hypertension ($r = -0.237$, $p < 0.05$), triglycerides ($r = - 0.325$, $p < 0.01$) and HDL cholesterol ($r = 0.368$, $p < 0.05$) and also a moderate correlation between FMD and LDL cholesterol ($r = -0.403$, $p < 0.05$) and total cholesterol ($r = - 0.511$, $p < 0.01$). In conclusion, endothelial dysfunction is present in hypertensive patients and it looks like that the metabolic factor play a much more important role then the mechanical factor.
Keywords: endothelial dysfunction, SAH, endothelin-1

10. BOOK REVIEW: Daniel David - A critical Review of the Current Trends in Psychotherapy and Clinical Psychology, Nova Science Publishers, 2006, VIII + 79 pages

Petru Derevenco

Besides the editor the book comprises eight contributors (six from the U. S. A. and two from Romania). The editor is Professor Daniel David from the Faculty of Psychology and Educational Sciences, Babeş-Bolyai University, Cluj-Napoca, Romania. Head of the Department of Clinical Psychology and Psychotherapy he is an outstanding expert in several areas of psychology, in bioethics and management of academic performance.
In the introduction the editor points out that the “present book is designed to provide a forum, guided by a critical rationalist perspective, for leading scholars, researchers, and practitioners to share their perspectives and empirical findings on the current state and the future of the clinical field”. In the first chapter Th. Dowd analyses some recent books dealing with behavior therapy. There follows a review of H. Schloss and D. Haaga of other books and articles concerning evidence and new directions of mental health care. In chapter three B. Deacon and T. Fawzy report the contribution of David Barlow and his colleagues to the understanding and treatment of panic disorders. J. Mc Mahon covers in the next chapter the marriage and family therapy, compared to scientifically based interventions, pointing out the work of

John Gottman. In chapter five, D. David and A. Szentagotai analyze critically the rational emotive behavioral therapy with its misinterpretations and distortions. In chapter six S. Trip presents an interview with Albert Ellis – one of the initiators of the “cognitive revolution” in psychotherapy, where Dr. Ellis describes the rational emotive behavioral therapy. The last chapter contains an interview of D. David with Donald Meichenbaum, one of the founders of cognitive behavior therapy. We learn about the techniques employed to help traumatized patients to cope and change their behaviors. In the Conclusion D. David shows that many professionals, who call themselves cognitive behavioral therapists, often neglect the theoretical basis of the procedures involved.

This book on some current views in psychology is important for physiologists in their interdisciplinary research, focused for instance on stress. The opinions of Dr. Meichenbaum, the founder of stress inoculation training turns out very useful in this respect. Those concerned with stress will also avail themselves of the table on page 49 showing the relations among rational and irrational beliefs in a stressful situation. The detailed index and the rich references in most chapters are also worth considering.