Brucellosis in South Eastern Europe and Mediterranean Region

Public Health

Donev D. Brucellosis Control and Eradication in the South Eastern European Countries: Current Status and Perspective Strategies.
Maced J Med Sci. 2010 Sep 15; 3(3):......................... 221
Brucellosis is a serious concern in many SEE countries which needs comprehensive approach and investments in long-term, with sound strategies and programs for control and eradication, strengthening intersectoral and regional collaboration between all countries in the SEE region, with technical and financial support from European Commission and relevant international organizations.

Hristovski M, Cvetkovik A, Cvetkovik I, Dukoska V. Concept of One Health - a New Professional Imperative.
Maced J Med Sci. 2010 Sep 15; 3(3):......................... 229
Improving animal and human health globally should be through collaboration among all health sciences, especially between the veterinary and human medical professions to address critical needs. Meeting new global challenges and among them protecting health head-on through collaboration among multiple professions - veterinary medicine, human medicine, environmental protection, public health, etc. It is necessary to develop centres of excellence for education and training in specific areas of public health. In addition, increasing professional opportunities, and gaining scientific knowledge to create innovative programs to improve health is essential.

Maced J Med Sci. 2010 Sep 15; 3(3):......................... 233
The results presented in this paper are the results of the cattle serum samples tested for brucellosis at the serological laboratory of the Faculty of Veterinary Medicine – Skopje between January 2005 and September 2009. These tests were conducted for the needs of the Veterinary Office within the MAFWE in order to follow the results of the implementation of the control strategy of bovine brucellosis in Republic of Macedonia.

Talevski V. An Overview of Introducing Various Laboratory Tests for Diagnosis of Human Brucellosis in the Republic of Macedonia.
Maced J Med Sci. 2010 Sep 15; 3(3):......................... 239
Diagnosis of human brucellosis is based on clinical features and laboratory tests (culture, serology testing and molecular techniques). The variable symptoms, sub-clinical and atypical infections, in both acute and chronic stages, make diagnosis of human brucellosis difficult.

Djuricic B. Brucellosis in the Republic of Serbia – The Epizootiological Situation.
Maced J Med Sci. 2010 Sep 15; 3(3):......................... 246
Brucellosis in Serbia during the last decade shows some specific characteristics such as rapid spread and easy transmission, and persistence. Outbreaks in new localities and increase of human cases were observed. The increase of brucellosis in the southern part of Serbia was facilitated by the border porosity and lack of control of animal movements toward Kosovo and Metohia territories and migration of infected sheep.

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Brucellosis is included as an occupational disease in the Macedonian List of Occupational Diseases, and diagnosis and verification of the occupational diseases, according to the national medical criteria, are realized at the Occupational Health Institute of R. Macedonia. According to the official health statistics, in the last two decades in Macedonia as an endemic region, a high incidence of human brucellosis has been registered, with more than 300 reported cases per year.

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Cutaneous manifestations or complications have been reported rarely, less than 5% (3.8 % - 17 %) in different published studies. A variety of skin lesions have been reported in patients with brucellosis, including rashes (25%), nodules, papules, erythema nodosum (25%), eczematous lesions (12.5%), psoriasiform lesions (12.5%), petechiae, purpura and others.

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During the period from 1980 to 2009, approximately 11,000 human patients were registered, with an annual average of morbidity of 20 per 100,000 inhabitants. The health service directed its preventive measures towards three target groups: the general population, farmers, and those engaged in relevant professions.

Valkanova NK, Paunov TP, Stoyanova KS, Romanova HA. Problems in Anti-epidemic Control of Brucellosis in Bulgaria.
Maced J Med Sci. 2010 Sep 15; 3(3):.......................... 268
Registered morbidity of brucellosis in Bulgaria varied between 0.01 cases (1959, 1974, 1985, 1993, 1996, 2000) up to 0.048 (2005) and 0.74 (2007) per 100,000 inhabitants. No cases of human brucellosis were recorded in Bulgaria for 35 years of the entire study period from 1950 to 2007. The periods without registered cases of brucellosis initially lasted about 7-10 years and later 2-5 years.

Brucellosis routine surveillance detection must be undertaken, particularly among high-risk groups (farmers, shepherds, workers in slaughterhouses, butchers, veterinarians, and laboratory personnel). It is mandatory for early case-based reporting by healthcare providers/laboratory to upper levels of the public health sector and the animal health sector.


Although the diagnosis was delayed a multidisciplinary approach involving measures pointed to both humans and animals helped control the infection in 2009. Physicians in nonendemic countries such as Bulgaria should be aware of the fact that brucellosis is a possible cause of fever of unknown origin with a history of animal contact.


According to the data of the Institute for Public Health in 2008, 450 diseased people suffering from brucellosis were registered in the Republic of Macedonia with certain districts dominating over others. There is an annual Programme for investigation of occurrence, protection from, and elimination of brucellosis and the results from implemented activities are compiled as a national report by the IPH. Health promotion and health education are part of implemented preventive measures.

Clinical Science


In this study, the toxic effect of lead on the testicular system was investigated, and Aqueous Extract of Juglans Nigra (JnE) (a well known antioxidant) was administered orally to prevent this effect.

Clinical Science


The aim of this study was to investigate the pattern of sensitization to aero-allergens with SPT among asthmatic children in Mashhad (North east of IRAN).


An overall prevalence of 30.6% of bacteriologically proven otitis media was observed in this study. The prevalence were higher in males and in children 5 years and younger. Following the high level resistance observed, rational use of antibacterial agents is advocated.


Sixty healthy adults undergoing simple third molar extraction under local anesthesia (2% lidocaine with epinephrine 1:80,000) were selected in the study. 30 patients received a soft laser with an 870 nm wave length applied intra- orally from a distance of 1 cm for 10 minutes after extraction procedure. The energy output was 4 J/cm², with constant power density of 50 mW. Laser treatment was simulated in the other 30 patients.


Recent literature has questioned ghrelin influence on postsurgical metabolism. Studies of the effect of cord plasma ghrelin level on newborn metabolism are few. This study aimed to compare pre- and full term newborn ghrelin concentration at birth, and its relation to anthropometric and metabolic parameters.


Extensive muscle crush injury culminating in a crush syndrome or traumatic rhabdomyolysis is often lethal unless treated actively on war footing. The causes of death in crush syndrome include hypovolemic shock, hyperkalemia, hypocalcemia, metabolic acidosis, acute myoglobinuric renal failure and the acute muscle – crush compartment syndrome. The literature is divided on the treatment, while some surgeons advocate early surgery others maintain, late surgery is best.


Here, there is report a case in which an extra sixth band of LDH was visualized which forms a complex with IgG in the circulating sera of burn subject. The presence of LDH-IgG complex was confirmed in freshly collected sera using PAGE and immunological approaches. The complex get disappears from 2nd day onwards. The probable reason of the formation of this complex and its relation with the progression of the disease is discussed.

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Instructions for Authors