

TAB. 20.5 - RICERCHE EFFETTUATE ALTRE VARIE

Amadori°M

Physiological response and constitutive expression of interferons : roles and functions

New research on innate immunity / Mathis Durand and Clara V. Morel, editors. - New York : Nova Science Publishers, Inc, c2008. - p 1-11. - 58 bib ref [Nr. Estr. 3964]

Constitutive expression of type I interferon (IFN) has been convincingly demonstrated in lymphoid and non-lymphoid tissues. This finding is a major challenge to the traditional view depicting IFNs as fundamental antiviral cytokines with other accessory properties. On the contrary, there is strong evidence of a physiological IFN response, probably linked to a default anti-inflammatory control action in tissues. This is diverted by microbial infections to pro-inflammatory effector functions in the framework of the innate immune response. Thus, constitutive expression of type I IFNs should be set into an alternative conceptual framework, recognizing these cytokines as homeostatic agents with a steady-state role under health conditions. The co-existence in peripheral blood mononuclear cells of pigs of type I and type II (γ) IFN outlines a novel scenario, probably related to the host's need for a fine tuning of the inflammatory and/or immune response to substantial changes of the external milieu.

Cinotti°S, Penocchio G

Buon corso a tutti

30 giorni. - Vol. 1 no 8 (2008). - p 6 [Nr. Estr. 3875]

Dottori°M

Interazione virus vettore

X Congresso Nazionale Societa' Italiana Diagnostica di Laboratorio Veterinaria (SIDiLV) : 22-24 Ottobre 2008 : volume degli atti / [s.l. : Societa' Italiana Diagnostica di Laboratorio Veterinaria (SIDiLV), 2008]. - p 5-6 [Nr. Estr. 3954]

Congresso Nazionale Societa' Italiana Diagnostica di Laboratorio Veterinaria (SIDiLV) (10. : Alghero : 22-24 Ottobre 2008)

Epis S, Sasserà D, Beninati T, Lo N, Beati L, Piesman J, Rinaldi L, McCoy KD, Torina A, Sacchi L, Clementi E, Genchi M, Magnino°S, Bandi C

Midichloria mitochondrii is widespread in hard ticks (Ixodidae) and resides in the mitochondria of phylogenetically diverse species

Parasitology. - Vol. 135 (2008). - p 485-494. - 24 bib ref [Nr. Estr. 3980]

The hard tick *Ixodes ricinus* (Ixodidae) is the sole animal thus far shown to harbour an intra-mitochondrial bacterium, which has recently been named *Midichloria mitochondrii*. The objectives of this work were (i) to screen ixodid ticks for *Midichloria*-related bacteria and (ii) to determine whether these bacteria exploit the intra-mitochondrial niche in other tick species. Our main goal was to discover further models of this peculiar form of symbiosis. We have thus performed a PCR screening for *Midichloria*-related bacteria in samples of ixodid ticks collected in Italy, North America and Iceland. A total of 7 newly examined species from 5 genera were found positive for bacteria closely related to *M. mitochondrii*. Samples of the tick species *Rhipicephalus bursa*, found positive in the PCR screening, were analysed with transmission electron microscopy, which revealed the

presence of bacteria both in the cytoplasm and in the mitochondria of the oocytes. There is thus evidence that bacteria invade mitochondria in at least 2 tick species. Phylogenetic analysis on the bacterial 16S rRNA gene sequences generated from positive specimens revealed that the bacteria form a monophyletic group within the order Rickettsiales. The phylogeny of *Midichloria* symbionts and related bacteria does not appear completely congruent with the phylogeny of the hosts.

Fedrizzi°G, Accurso D, Scandurra S, Montesissa C

Kinetics of Tilmicosin after per os administration to rabbits

Fourth International Conference on Antimicrobial Agents in Veterinary Medicine (AAVM) : Prague, Czech Republic, August, 24-28, 2008 : program and abstracts / [s.l. : s.n., 2008]. - p 83 [Nr. Estr. 3841]

International Conference on Antimicrobial Agents in Veterinary Medicine (AAVM) (4 : Prague, Czech Republic : August, 24-28, 2008)

Tilmicosin, a macrolide with great clinical efficacy in respiratory diseases, easily attains high intrapulmonary concentrations as alveolar macrophages can concentrate the drug. When tilmicosin is administered to pigs (18,5 mg/kg) via drinking water, the drug attains blood levels lower than 0.01 µg/mL and peak concentration in lungs (0.4-0.6 µg/g) after 72 hours. In chicks repeat oral tilmicosin (18 mg/kg) attains higher levels in blood (0.10 µg/ml) and in lungs (3.29 µg/g at 48 hours). In calves fed tilmicosin via milk at 12.5 mg/kg twice a day for five days, peak concentration was reached in blood 102 h after treatment and in lungs after 78 h (42.7 µg/g). In the present kinetic study Tilmicosin (12 mg/kg bw) was administered once to 8 fasted rabbits, via oral gavage. Absorption rate was fast, as blood peak was already attained at the first sampling time (30 min). The rapid decrease to less than 0.10 µg/ml within two hours and steady blood levels maintained around 0.03 µg/ml for 48 hours after administration, suggested a rapid distribution to target tissues with a slow release. The efficacy of orally administered Tilmicosin to control respiratory disease in rabbits was achieved in clinical trials. A study with 3tilmicosin administered subcutaneously to rabbits, confirmed its fast distribution to lungs: peak concentration (14.43 µg/g) was attained within two hours and levels >3µg/g were maintained for 72 h. To confirm that oral Tilmicosin could attain concentrations exceeding the target pathogen's MIC in rabbit lungs and alveolar macrophages, much faster and longer than in blood, its distribution to target tissues should be carefully evaluated.

Ferrari°M, Villa°, De_Benedictis°P, Toffan A, Dott i°S

Impiego delle colture cellulari per isolamento e coltivazione del virus dell'influenza aviare = Use of cell cultures for avian Influenza virus isolation and cultivation

Atti Soc Ital Sci Vet. - Vol. 62 (2008). - p 127. - 3 bib ref [Nr. Estr. 4034]

Convegno Nazionale della Societa' Italiana delle Scienze Veterinarie (SISVET) (62 : S. Benedetto del Tronto (AN) : 2008)

Il virus dell'Influenza nelle differenti specie, soprattutto quella di origine aviare, è attualmente oggetto di particolare attenzione in ragione della sua potenziale capacità di superare la barriera di specie e trasmettere l'infezione all'uomo. A tal fine gli aspetti diagnostici, le possibili modalità di diffusione e i mezzi di prevenzione rivestono un ruolo cardine. Per quanto concerne i metodi diagnostici, l'isolamento del virus ha un ruolo primario: l'embrione di pollo rappresenta il substrato di riferimento, ma al fine di fronteggiare eventuali andemie, è indispensabile poter disporre di substrati biologici alternativi in modo da poter coltivare e amplificare elevate quantità di virus. Tali tipi di substrati sono rappresentati dalle colture cellulari e alcune di esse (MDCK, VERO) (1) presentano i requisiti necessari per il loro impiego nella preparazione di virus vaccinale. Tuttavia, al fine di ampliare lo spettro delle colture cellulari utilizzabili in ambito diagnostico ed in quello produttivo si ritiene importante identificare altri tipi di cellule. Lo scopo del presente studio è stato proprio quello di accertare la capacità di isolamento di diversi tipi di linee cellulari di differenti sottotipi del virus

dell'Influenza aviare da materiale patologico.

The risk of avian Influenza virus transmission to human with the emergente of a novel pandemic is of high concern. In order to overcome the limits presented by embryonated eggs (EE), cell cultures may represent a convenient biological system. The aim of this study was to compare the susceptibility of different cell lines (NSK, MDCK UMNSAH/DF1) in comparison to embryonated eggs, to avian Influenza virus (AIV) of high and low pathogenicity. 3 Groups of 30-40 day-old SPF chickens were experimentally infected with H5N2, H7N 1 and H7N3 subtype. The results of the study have shown that RT-Real Time PCR can detect viral RNA in almost all the pathological samples. Among the biological system, EE is confirmed to be the most susceptible while in the cell lines virus isolation has been performed only in NSK and MDCK. No virus was detected in UMNSAH/DFI cells.

Ferrari° M, Villa° R, Dotti° S, Losi° CG

The italian cell culture reference centre

ISBER 2009 Annual Meeting & Exhibits : ISBER, Celebrating a Decade of Growth and Development in International Biorepository Excellence : May 12 - 15, 2009 Portland, Oregon, USA / [s.l. : s.n., 2009]. - p 39 [Nr. Estr. 4041]

ISBER 2009 Annual Meeting & Exhibits : Portland, Oregon, USA : May 12 - 15, 2009)

The National Cell Culture Reference Laboratory, located at the Institute Zooprofilattico in Brescia, collects a large amount of cell cultures belonging to several animal species, for a total of about 35000 frozen vials. In particular, it includes 424 established cell lines which have been obtained either from normal or from cancer tissues, 54 hybridomas, 57 primary cell culture types from various organs and tissues and recently, also biological) samples from patients with Alzheimer's disease have been collected. The Cell Culture Centre laboratory in Brescia is divided into the following main sectors: general services, culture media preparation, manipulation of established and primary cell lines, quality control) (in a separate area from the previous one), liquid nitrogen cell storage. Together with improvements in preparation methods of new cell types, particular attention is paid to quality control) in order to distribute well characterizes products free from contaminants. Ali tests (detection of bacteria, mycoplasma, human and animal viruses, bacterial endotoxins, cell line cross contaminations, tumorigenity "in vitro" and "in vivo") are performed in accordance with European Pharmacopeia, and are carried out on final products. In addition to cell cultures, a large number of viruses from several animal species (pig, cattle, fowl, horses, sheep/goat) and human, each grown in the appropriate cell culture system, are banked. Moreover, immune sera prepared in laboratory animals specific for each virus have been prepared and collected. The biological materials are supplied as reference samples for either "in vivo" tests and "in vitro" virological and molecular biology investigations.

Ferreri AJM, Dognini GP, Ponzoni M, Pecciarini L, Cangini MG, Santambrogio G, Resti AG, De_Conciliis C, Magnino°S, Pasini E, Vicari° N, Dolcetti R, Doglioni C

Chlamydia psittaci-eradicating antibiotic therapy in patients with advanced-stage ocular adnexal MALT lymphoma

Ann Oncol. - Vol. 19 no 1 (2008). - p 194-195. - 5 bib ref [Nr. Estr. 3981]

Ferreri AJM, Dolcetti R, Dognini GP, Malabarba L, Vicari°N, Pasini E, Ponzoni M, Cangini MG, Pecciarini L, Resti AG, Doglioni C, Rossini S, Magnino°S

Chlamydomphila psittaci is viable and infectious in the conjunctiva and peripheral blood of patients with ocular adnexal lymphoma : results of a single-center prospective case-control study

Int J Cancer. - Vol. 123 (2008). - p 1089-1093. - 19 bib ref [Nr. Estr. 3979]

Ocular adnexal NALT lymphoma (OAML) is linked to *Chlamydia psittaci* (Cp) infection. Viability and infectivity of Cp, demonstrated by growth in culture, has not been yet investigated in these patients. We conducted a single-center prospective case-control study to assess the prevalence, viability and infectivity of Cp in 20 OANIL patients and 42 blood donors registered in a 6-month period. The presence of Cp in conjunctival swabs and peripheral blood mononuclear cells (PBMC) of patients and donors was assessed by TETR-PCR and in vitro cultures. From an epidemiological point of view, OANIL patients often resided in rural areas, and reported a history of chronic conjunctivitis and prolonged contact with household animals (85% vs. 38% of donors; $p = 0.00001$). Cp was detected in lymphoma tissue in 15 (75%) patients. Cp DNA was detected in conjunctival swabs and/or PBMC from 10 (150%) patients and in PBMC from 1 (2%) donor ($p = 0.01$). Viability and infectivity of Cp, demonstrated by growth in culture, were confirmed in conjunctival swabs and/or PBMC from 5 (25%) patients, but not in donors ($p = 0.002$). This prospective study demonstrates, for the first time, that Cp present in the conjunctiva and PBMC of OAML patients is capable to grow and be isolated in cell cultures. Cp infection is common in OANIL patients and exceptional in blood donors. Epidemiological data of OAML patients (prolonged contact with household animals and chronic conjunctivitis) are consistent with Cp exposure risk.

Losi°CG, Ferrari°S, Sossi°E, Villa°R, Ferrari° M

An alternative method to isoenzyme profile for cell line identification and interspecies cross-contaminations: cytochrome b PCR-RLFP analysis

In Vitro Cell Dev Biol Anim. - Vol. 2008). - p . -27 bib ref [Nr. Estr. 3806]

One of the major risks in cell culture laboratories is the misidentification and cross-contamination of cell lines. Several methods have been used to authenticate cell lines, including isoenzyme profiling, the test suggested by European Pharmacopeia, which is performed at the Tissue Culture Centre in Brescia. However, this method displays several disadvantages, such as high variability and low reproducibility, and it is time consuming and requires high cell concentrations to be performed. Therefore, an alternative method has been developed to continue the species of origin of 27 different animal cell cultures. A polymerase chain reaction (PCR)--restriction fragment length polymorphism (RFLP) assay was optimized, based on the use of a pair of primers that anneal to a portion of the cytochrome b gene in all the species. The amplification product was digested with a panel of six restriction enzymes, and the pattern derived was resolved on 3% high-resolution agarose gel. For 23 species, this protocol produced a unique restriction pattern, and the origin of these animal cells resulted to be confirmed by this analysis. Furthermore, results indicate that cytochrome b PCR-RFLP was able to amplify target sequences using very low amounts of deoxyribonucleic acid (DNA). Its sensitivity in detecting interspecies cross-contamination was comparable to that of isoenzyme analysis (contaminating DNA should represent at least 10% of the total DNA). For 4 of the 27 species (sheep, dog, Guinea pig, and Rhesus monkey) the observed pattern, even if highly reproducible, showed additional bands; for these species, specific PCR was also performed.

Losi°CG, Sesso°L, Ferrari°M,

Isolation, characterization and storage of animal mesenchymal stem cells

ISBER 2009 Annual Meeting & Exhibits : ISBER, Celebrating a Decade of Growth and Development in International Biorepository Excellence : May 12 - 15, 2009 Portland, Oregon, USA / [s.l. : s.n., 2009]. - p 38 [Nr. Estr. 4042]

ISBER 2009 Annual Meeting & Exhibits : Portland, Oregon, USA : May 12 - 15, 2009)

Mesenchymal stem cells (MSCs) are multipotent cells resident in several adult tissues (as bone marrow and fat) and in umbilical cord, that are able to differentiate along multiple lineages such as chondrocytes, osteoblasts and adipocytes. This plasticity suggests their potential in reparative

medicine and in tissue engineering, a powerful alternative to organ and tissue transplantation based on the use of differentiated cells. In veterinary field, MSC therapy is mainly applied in horses and dogs to treat tendon, ligament, bone and cartilage injuries. Furthermore, it has been shown that MSC are characterised by an immunosuppressive action that permits the use of allogenic cell transplants allowing for the creation of stem cell banks for heterologous implants. The National Cell Culture Reference Laboratory, located at the Istituto Zooprofilattico in Brescia, is already involved in biobanking of numerous cell culture types. The experience in stem cell technology, previously restricted to research on animal models, can also be potentially used for therapeutic approaches in horses and dogs. On the basis of these characteristics, Cell Culture Laboratory would represent a potential Centre in Italy for animal mesenchymal stem cell isolation, characterization and storage.

Nordengrahn A, Gustafsdottir SM, Ebert K, Reid SM, King DP, Ferris NP, Brocchi E, Grazioli S, Landegren U, Merza M

Evaluation of a novel proximity ligation assay for the sensitive and rapid detection of foot-and-mouth disease virus

Vet Microbiol. - Vol. 127 (2008). - p 227-236. - 14 bib ref [Nr. Estr. 3642]

A novel proximity ligation assay (PLA) using a pan-serotype reactive monoclonal antibody was developed and evaluated for the detection of foot-and-mouth disease virus (FMDV) in clinical samples collected from field cases of disease. The FMDV-specific PLA was found to be 100 times more sensitive for virus detection than the commonly used antigen capture-ELISA (AgELISA). As few as five TCID₅₀ were detected in individual assays, which was comparable with the analytical sensitivity of real-time RT-PCR. Although this assay was capable of detecting diverse isolates from all seven FMDV serotypes, the diagnostic sensitivity of the PLA assay was lower than real-time RT-PCR mainly due to a failure to detect some SAT 1, SAT 2 and SAT 3 FMDV strains. In conclusion, this new PLA format has high analytical sensitivity for the detection of FMDV in clinical samples and may prove valuable as a rapid and simple tool for use in FMD diagnosis.

Ponzoni M, Ferreri AJM, Guidoboni M, Lettini AA, Cangi MG, Pasini E, Sacchi L, Pecciarini L, Grassi S, Dal_Cin E, Stefano R, Magnino S, Dolcetti R, Doglioni C

Chlamydia infection and lymphomas : association beyond ocular adnexal lymphomas highlighted by multiple detection methods

Clin Cancer Res. - Vol. 14 no 18 (2008). - p 5794-5800. - 26 bib ref [Nr. Estr. 3978]

Chlamydia psittaci (Cp) has been associated to ocular adnexal lymphomas (OAL) with variable geographic distribution. Herein, we used multiple Chlamydia detection tools to identify Cp elementary bodies-containing cell and to assess Cp prevalence in both nodal and extranodal Lymphomas. Experimental Design: TETR-PCR, immunohistochemistry, immunofluorescence, electron microscopy, and laser-capture microdissection were done in 35 OALs to define their effect in Chlamydia detection and, moreover, to identify the Cp cellular carrier. Cp prevalence was screened by TETR-PCR in 205 extra orbital lymphomas and 135 monopolistic controls. Results: Twenty-six (74%) OALs were associated with Cp infection: immunohistochemistry, immunofluorescence, and laser-capture microdissection-assisted PCR showed that monocytes/macrophages were the Cp carriers; electron microscopy showed the presence of intact Cp elementary bodies into these cells. Immunohistochemistry and TETR-PCR showed a 70% concordance rate (P = 0.001). Cp DNA was equally prevalent in non-OAL, nodal, and extranodal lymphomas: among the latter, it was more common in diffuse large B-cell lymphomas of the skin (P = 0.03) and Waldeyer's ring. Conclusions: This multiparametric approach shows, for the first time, that monocytes/macrophages are the carriers of Cp, Cp seems preferentially associated with lymphomas arising in organs primarily exposed to antigens. The clinical implications of these findings deserve to be prospectively investigated.

Rosetti M, Frasnelli^oM, Fabbri F, Arienti C, Vannini I, Tesei A, Zoli W, Conti M

Pro-apoptotic activity of cyclopentenone in cancer cells

Anticancer Res. - Vol. 28 (2008). - p 315-320. - 22 bib ref [Nr. Estr. 3767]

Studies on cyclopentenone prostaglandins (CPPGs), clavulones and other cyclopentenones have shown that these compounds have a significant anticancer activity mediated by their cyclopentenone (CP) chemical moiety. In this study the cytotoxicity against cancer cells of the model compound cyclopent-2-en-1-one (2CP) was investigated. Being a highly water soluble small molecule, 2CP could be an ideal candidate to overcome pharmacological issues related to drug delivery and penetration. Its cytotoxic activity was tested on various melanoma and lung cancer cells. Interestingly, 2CP was both cytotoxic and pro-apoptotic, more pronounced on melanoma cells, at concentrations in the submicromolar range. On melanoma cells its mechanism of action was mediated by the mitochondria and the activation of caspase 3.

Sesso L, Losi^oGC, Renzi S, Torre ML, Galdi A, Russo V, V igo D, Ferrari^oM

Studio preliminare d'isolamento, amplificazione e caratterizzazione di cellule staminali mesenchimali da tessuto adiposo equino = Preliminary study of isolation, amplification and characterization of equine adipose derived mesenchymal stem cells

Atti Soc Ital Sci Vet. - Vol. 62 (2008). - cdrom p 95-96. - 4 bib ref [Nr. Estr. 3807]

Convegno Nazionale della Societa' Italiana delle Scienze Veterinarie (SISVET) (62 : S. Benedetto del Tronto (AN) : 2008)

Le Cellule Staminali Mesenchimali (CSM) sono cellule progenitrici presenti nel midollo osseo, nel tessuto adiposo, nel muscolo ed in altri tessuti di origine mesodermica (1). In vitro le CSM sono in grado di aderire a diversi supporti assumendo una morfologia fibroblastic-like e con opportuni terreni colturali possono differenziare in diverse linee cellulari quali quella adipocitica, osteocitica e condrocitica. In vivo le CSM sono in grado di differenziare, grazie a fattori locali, dopo essere state impiantate in tessuti di origine mesenchimale (2). Le CSM, in virtù della loro capacità differenziativa, sono candidate per la terapia cellulare in ambito ortopedico sia umano che veterinario. Recenti studi si sono focalizzati sull'individuazione di una fonte cellulare potenzialmente utilizzabile in ingegneria e terapia tissutale. Le CSM isolate da tessuto adiposo rappresentano un'alternativa per la cura di patologie ortopediche sia per la minor invasività del prelievo, rispetto ad altri tessuti (midollo osseo), che per la relativa abbondanza di CSM. Con il presente lavoro è stato messo a punto un idoneo protocollo d'isolamento, amplificazione, caratterizzazione e conservazione delle CSM da tessuto adiposo nella specie equina per un loro potenziale impiego in terapia.

Mesenchymal stem cells (MSCs) have been isolated from a variety of tissues and tested for differentiation into different cell lineages. MSCs have been used experimentally and in limited numbers of clinical cases in the equine orthopaedic field. The aim of this study is to develop a protocol for the isolation, amplification and finally the characterization of equine adipose derived mesenchymal stem cells (ADSC). Fibroblastic-like cell cultures were obtained by the adipose tissue enzymatic digestion. These cells were able to grow, in differentiation medium, toward the adipogenic lineage. This study is the first step for a potential use of cell therapy in equine orthopaedic field, in particular for tendon re-construction. Further investigations will be conducted to better characterize equine ADSC.

Stacchiotti A, Morandini F, Bettoni F, Rodella LF, Grigolato P, Lavazza^oA, Aleo MF

Nephrotoxicity induced by inorganic Hg(II) and Pb(II): a microscopic and biochemical in vitro study

14th European Microscopy Congress : Aachen, 1-5 September 2008

/ a cura di Ankje Aretz, Benita Hermanns-Sachweh, Joachim Mayer. - [s.l. : s.n, 2008]. - v. 3: Life science. - p 289-290. - 4 bib ref [Nr. Estr. 4016]

European Microscopy Congress (14th : Aachen, Germany : 1-5 September 2008)

Stacchiotti A, Pedretti N, Aleo Mt, Lavazza°A

Effects of schisandrin B on NRK52E cells exposed to inorganic mercury

Ital J Anat Embriol. - Vol. 113 n 2 Suppl 1 (2008). - p 266. - 3 bib ref [Nr. Estr. 4017]

Congresso Società Italiana di Anatomia e Istologia Meeting of the Italian Society of Anatomy and Histology (62. : Verona, Italia : 14-16 September 2008)

Aims: The exposure to mercuric chloride (HgCl₂) causes an acute oxidative injury in renal tubular epithelial cells [1]. Schisandrin B (Sch.B) is a dibenzocycloocta diEne derivative from the fruit of Schisandra chinensis, a popular Chinese herb, successfully used against viral and toxic hepatitis and cardiac ischemic damage [2]. Stress proteins (Hsps) are cytoprotective chaperones enhanced in the kidney during mercury toxicity [3]. Since the renal efficacy of Sch.B is largely unknown, this in vitro study is aimed to better clarify its role against HgCl₂-nephrotoxicity on a rat proximal tubular cell line. We focused on morphology and on the expression of two Hsps involved in oxidative damage, constitutive HSP25 and inducible HSP72. Methods: Sch.B dissolved in DMSO was added to medium up to 10 μ M concentration. NRK-52E cells in growth phase were incubated for 48h with 10 μ M Sch.B or DMSO-alone before 24h treatment with 20 μ M HgCl₂. Ultrastructural analysis was performed on different treatments. Both presence and abundance of Hsps were tested by immunohistochemistry and immunoblotting using specific polyclonal and monoclonal antibodies. Results and Conclusions: Sch.B-alone treated NRK52E cells have shown normal ultrastructure. After Sch.B pretreatment, reduced necrosis and more preserved mitochondria were observed respect to HgCl₂ exposed cells. We did not find any difference in Hsps expression between DMSO and Sch.B-alone treated cells. Indeed HSP72 was undetectable and HSP25 was moderately expressed. However, after exposure to 20 μ M HgCl₂ for 24h, both Hsps enhanced. Remarkably, after Sch.B and mercury coadministration, HSP72 persisted while HSP25 increased further. These novel in vitro data suggest that Sch.B mitigates mercury-induced damage in NRK52E cells by maintenance of specific Hsps.

Vergerio°EE

E-learning per il benessere animale

30 giorni. - Vol. 1 no 9 (2008). - p 9-13. [Nr. Estr. 4064]

Zanardi°G, Stefini G, Avisani°D, Bonazza V, Cantoni R , Magnolini C, Tranquillo°V

Il sistema informativo epidemiologico (SIE) dell'osservatorio veterinario della Regione Lombardia

Epidemiologia : strumenti per conoscere, agire e decidere in sanità pubblica veterinaria : IV Workshop nazionale di epidemiologia veterinaria : Università degli studi "Sapienza" : Roma, 11-12 Dicembre 2008 : riassunti / a cura di Gaia Scavia, Susan Babsa e Marcello Sala. - Roma : Istituto Superiore di Sanità, 2008. - (ISTISAN congressi ; 08/C12) p 164-165 [Nr. Estr. 3908]

Workshop nazionale di epidemiologia veterinaria (4 : Roma : 11-12 Dicembre 2008)

Ancora oggi, vi è molta confusione quando si parla di sistemi informativi e l'errore più comune è di assimilarli e usarli come sinonimo di sistemi informatici. È un'interpretazione riduttiva, poiché questi

ultimi sono uno tra i componenti dei sistemi informativi, insieme alle risorse umane (operatori, programmatori, bio-statistici, epidemiologi, ecc.) e i programmi informatici (software), installati su calcolatori (hardware). La raccolta, il controllo, l'archiviazione, l'elaborazione e l'analisi dei dati funzionali alla valutazione epidemiologica quali-quantitativa di trend di malattia in Sanità Pubblica sono elementi fondamentali, nella loro corretta applicazione, per l'esecuzione di un'appropriata valutazione del rischio. Le fonti dei dati sono svariate e risiedono molto spesso presso diversi Enti e, soprattutto, sono gestite con software differenti. La realizzazione di sistemi informativi, che consentano di aggregare dati provenienti da fonti diverse, è un'esigenza comune a chi si occupa di valutazione del rischio (Osservatori Epidemiologici) e di chi lo gestisce a diversi livelli, provinciale, regionale e nazionale. Tecnologie di webservices sono utilizzate per condividere i dati con altri sistemi, rispettando le scelte tecniche di sviluppo locale, al fine di organizzarli in informazioni sanitarie.

La realizzazione del SIE, di cui è parte integrante il WebGIS, si è basata su tecnologie web con i seguenti obiettivi: – integrare le informazioni anagrafiche e sanitarie generate dai servizi veterinari territoriali delle AA.SS.LL. con gli esiti analitici associati, prodotti dai laboratori dell'IZSLER; – fornire un'unica interfaccia di scambio delle informazioni sanitarie disponendo di strumenti in grado di muoversi coerentemente nei diversi archivi, che conservano le diverse informazioni sanitarie; – permettere la programmazione delle attività sanitarie e il rintraccio dei risultati di laboratorio in tempo reale e dinamico; – disporre di strumenti per la generazione di report dinamici, rappresentazioni grafiche, statistiche diverse per differenti realtà territoriali (Regione, Provincia, ASL, Distretti, Comuni) e unità d'interesse, dalla singola unità produttiva (allevamento) ad aggregati amministrativi o geografici; gestire i flussi informativi associati ad emergenze epidemiche. Il SIE è stato sviluppato con tecnologie open-source ed è accessibile via WEB mediante il dominio di secondo livello www.oevr.it Le funzionalità attive, fruibili al momento da parte della sola UO Veterinaria della Regione Lombardia, riguardano prevalentemente la Sanità Animale, ma è prevista l'integrazione con un altro sistema informativo denominato VetWeb, che gestisce le attività dei servizi veterinari territoriali della Lombardia anche nelle aree B e C, ai fini della programmazione sanitaria. Il collaudo del sistema consentirà in futuro il suo utilizzo esteso, integrato e interattivo con i laboratori dell'IZSLER e i servizi veterinari delle AASSLL.