

MEDIDAS GENERALES DE PREVENCIÓN DE ACCIDENTES HIPOBÁRICOS-HIPERBÁRICOS EN LA ESFERA OTORRINOLARINGOLÓGICA

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RESUMEN

Los accidentes barotraumáticos en la esfera otorrinolaringológica son muy frecuentes, especialmente el de oído medio. Prevenirlos es una de las tareas en las que más hincapié debemos hacer. Para ello, debemos realizar un estudio anatómico de vías altas en el que analicemos las fosas nasales y el *cavum*, así como estudios de función tubárica y estudios radiológicos para cuantificar la neumatización mastoidea. Es importante conocer las maniobras de compensación tubárica más comunes, así como la fisiopatología del propio barotrauma. En las personas con el diagnóstico de enfermedades que comprometen la función tubárica o el normal drenaje de los *ostia* sinusales, podemos aplicar medidas y tratamientos específicos que solucionan los problemas de compensación de presiones. En el medio aéreo se dispone de unas medidas muy sencillas encaminadas a la prevención de los barotraumas de oído.

Palabras clave: Prevención. Barotraumas. Función tubárica. Test de Williams. Otitis barotraumática. Sinusitis barotraumática. Aerotitis. Cámara hiperbárica.

EMPHASIZING THE MODIFICATIONS INDUCED TO THE CARDIAC FREQUENCY UNDER EXPOSING THE HUMAN BODY TO THE HYPOBARIC HYPOXIA

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SUMMARY

Objective. Recent studies have demonstrated the increasing importance of maintaining the cardiac frequency values within normal limits in order to reduce significantly the morbidity and mortality by heart diseases.

Method. Study of an 84-person group, mean aged 22, exposed to some hypoxia and hypobaric conditions through a hypobaric chamber, in conditions similar to those existing at 5500 m high altitude.

Conclusions. According to this study, 53,57% of the subjects developed a very good reaction response at the hypobaric hypoxia, 9,52% a good answer and 39,60% a satisfactory answer.

Key words: hypobaric chamber, hypobaric hypoxia, heart rate, high altitude.

TRAVELLING AND INFLUENZA

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SUMMARY

Influenza viruses are three kinds: A, B and C. Influenza is a disease caused by the influenza virus, most common by A or B types. A type influenza virus can change its surface antigens, in a minor way (drift) responsible for seasonal epidemics or in a major way (shift) responsible for pandemics. From 1977 the following subtypes A(H1N1), A(H3N2) and B (which can also mutate but is not classified in subtypes) were circulating. Since 2001 A(H1N2) was isolated in North America, Europe and Asia.

Seasonal influenza is a frequent disease. In northern temperate climate seasonal influenza epidemics occur in winter time, as in southern hemisphere from April until September. Influenza virus infection can occur in all age groups. Infection rate is the highest in children, but mortality and morbidity are in subjects over 65 years old and in those with associated diseases, constituting favourable conditions for influenza complications.

Avian influenza is caused by A influenza virus in birds. The most cases of human infection with the avian influenza virus were caused by direct transmission from domestic birds (chickens, ducks, and turkeys) or by direct contact with infected surfaces. Human to human transmission was reported limited, unsustained and ineffective.

The new influenza epidemic, the swine influenza, is caused by a new A virus, the swine influenza virus or the new influenza virus A(H1N1) 2009.

Symptoms do not allow differential diagnosis between influenza and other upper respiratory tract infections.

Lab tests, including viral culture, serology, quick tests, PCR and immunofluorescence support the diagnosis. The samples are taken from oropharyngeal or nasopharyngeal (better results) secretion.

There are two types of influenza vaccine. An inactivated virus administered intramuscular and live attenuated virus administered by nasal spray. In Romania only the trivalent inactivated vaccine is available.

Influenza vaccine must be taken annually, because post-vaccinal immunity drops in time and the composition must be updated to match circulating types. Dosage differs with age and vaccine type. For the inactivated vaccine two doses administered at one month interval are necessary for unvaccinated children and for children below 9 years old. In grownups, a second dose of vaccine within the same season does not improve the immune response.

REAPPRAISAL OF EUROPEAN GUIDELINES ON HYPERTENSION MANAGEMENT

Mirela Anghel, MD, PhD

SUMMARY

In the 2 years since the publication of the 2007 guidelines for the management of arterial hypertension of the European Society of Hypertension (ESH) and the European Society of Cardiology (ESC), research on hypertension has actively been pursued and the results of new important studies (including several large randomized trials of antihypertensive therapy) have been published. Some of these studies have reinforced the evidence on which the recommendations of the 2007 ESH/ESC guidelines were based. However, other studies have widened the information available in 2007, modifying some of the previous concepts, and suggesting that new evidence-based recommendations could be appropriate. Furthermore, some critical appraisal of the current recommendations of the ESH/ESC might be a useful step toward the preparation of a third version of the European guidelines in the future.

Keywords: hypertension, guidelines, cardiovascular risk, antihypertensive treatment

BEYOND THERAPEUTIC LIMITS – MALIGNANT PHEOCHROMOCYTOMA WITH LIVER METASTASES; MEN 1- FULMINANT EVOLUTION

Cristina Mirea M.D.

SUMMARY

Endocrine tumors exhibit sometimes features beyond therapeutic limits due to evolution of the disease, extension, metastases or poor compliance. Current experience with therapy of such cases is limited. Hereby we report 2 cases of endocrine tumors beyond therapeutic limits - malignant pheochromocytoma with liver metastases in an 49 years old female with a 6-year history of paroxysmal hypertension and multiple endocrine neoplasia (MEN) type 1 with fulminant evolution in an 48 years old female.

There are no curative treatments for malignant pheochromocytoma. Although several therapeutic options exist for these patients, all are limited and less than 40% of patients respond (mostly partial remission) to currently used therapeutic modalities.

In MEN1 patients with entero-pancreatic tumors a cure can only be achieved in a minority of patients, surgical removal of the tumor being limited by tumor extension or metastases.

Key words: malignant pheochromocytoma, MEN1

CONSIDERACIONES EN LA PRÁCTICA DE ACTIVIDADES SUBACUÁTICAS Y AERONÁUTICAS EN PACIENTES INTERVENIDOS DE CIRUGÍA OTORRINOLARINGOLÓGICA

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RESUMEN

Distintas intervenciones del ámbito de la otorrinolaringología, especialmente sobre el oído y los senos paranasales, pueden dar lugar a dudas sobre la posibilidad de seguir realizando actividades expuestas a cambios de presión, especialmente, el buceo y los vuelos. La que más interés a conllevado ha sido la estapedectomía, que en la actualidad sabemos que no debe resultar afectada por los cambios de presión, al menos, tras haber transcurrido unos días. Sobre las timpanoplastias, hay dudas en pacientes que han experimentado una reconstrucción de la cadena osicular con prótesis tipo TORP. En cualquiera de los casos, es importante valorar la función tubárica. Los pacientes de cirugía sobre los senos paranasales, y siempre que el resultado obtenido con la cirugía sea el adecuado y transcurrido un tiempo no inferior a 3 meses, también podrían bucear. En el caso de los implantes cocleares, no existe ninguna contraindicación. En pacientes intervenidos de cáncer de laringe puede haber limitaciones o dificultades muy marcadas en el caso de las técnicas totales y menores en las parciales.

Palabras clave: Estapedectomía. Timpanoplastia. Cirugía endoscópica. Senos paranasales. Buceo. Pilotos. Vértigo alternobárico.

THEORY AND MODELS OF SITUATION AWARENESS

Psychologist Violeta Ionescu Ph.D., Psychologist Daniela Popa

SUMMARY

The term “situation awareness” was adopted to describe the processes of attention, perception, and decision making that together form a pilot’s mental model of the current situation. Today, situational awareness is one of the most prominent research topics in the aviation Human Factors field.

The paper presents a review of situational awareness theory and models of ‘situational awareness’ in aviation environment.

Key words: situational awareness, information processing, mental model, attention, perception, decision

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