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**RESEARCH ARTICLE**

**IS IMPORTANT A DIAGNOSTIC DILEMMAS SECTION ON THE EUROPEAN POSITION PAPER ON  
 RHINOSINUSITIS AND NASAL POLYPS 2012 (EPOS 2012)?**

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Differential diagnosis, rhinosinusitis,  
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**Abstract**

**Introduction:** EPOS 2012 is the European Position Paper on rhinosinusitis and nasal polyps.

**Methods:** A review on the EPOS 2012 of acute rhinosinusitis on adults.

**Results:** There is a deficit of a diagnostic dilemmas section.

**Conclusions:** The diagnostic dilemmas section on EPOS 2012 is important. The clinicians should diagnose cases with the combination of similar symptomatology of rhinosinusitis and vascular pathology such as cerebral vascular disease.

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**Introduction:-**

EPOS 2012 is the European Position Paper on rhinosinusitis and nasal polyps. The Objectives and Aims of the EPOS 2012 include that “Rhinosinusitis is a significant and increasing health problem which results in a large financial burden on society. This EPOS 2012 revision is intended to be a state-of-the art review for the specialist as well as for the general practitioner: • to update their knowledge of rhinosinusitis and nasal polyposis; • to provide an evidence based review of the diagnostic methods; • to provide an evidence-based review of the available treatments; • to propose a stepwise approach to the management of the disease; • to propose guidance for definitions and outcome measurements in research in different settings.”

This guide offers evidence-based recommendations on its diagnosis and treatment (Fokkens et al, 2012).

**Methods:-**

A review on the EPOS 2012 of acute rhinosinusitis on adults.

**Results:-**

EPOS 2012 provides the clinical definition of acute and chronic rhinosinusitis with and without nasal polyps, the treatment evidence and recommendations for adults with acute rhinosinusitis and the evidence-based management scheme for adults with acute rhinosinusitis for primary care and non-ENT specialists (Fokkens et al, 2012).

On this guide, there is a deficit of a diagnostic dilemmas section.

The symptomatology of rhinosinusitis could be the Achilles' heel for the diagnosis of cerebral vascular disease (Kaur et al, 2013).

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**Discussion:-**

Acute Rhinosinusitis (RS) is a significant health problem worldwide. It is an infection of the nasal passages and the paranasal sinuses. It usually starts as a self-limiting viral infection of the sinonasal mucosa. The term acute RS describes a sudden onset of two or more symptoms of nasal discharge, nasal blockage or congestion, facial pressure and reduction or loss of sense of smell, which are less than 12 weeks in duration. If these symptoms are less than 10 days, it is of viral etiology and hence called acute viral RS (common cold) (Kaur et al, 2013).

Patients commonly attribute symptoms such as headache, facial pain, nasal congestion, or rhinorrhea to “sinus trouble” when in fact it may be due to various other reasons. Primary care physicians often tend to think of RS as an acute bacterial infection, hence antibiotics are prescribed in 92% of patients in the UK and 85–98% of rhinosinusitis patients in the US.

RS has accounted for 12 to 17 million annual visits to physicians and for 12% of antibiotics prescribed to adults in the US, making it one of the 10 most common conditions to be treated in ambulatory practice (Masood et al, 2007).

Head and facial pain is a common symptom, representing up to 4.5% of presenting complaints in the emergency department. A foremost consideration in this patient population is excluding aneurysmal subarachnoid hemorrhage (ASAH), which accounts for 1% of all headaches in patients presenting to the emergency department. ASAH has an annual incidence of 1 to 2.5 per 10,000 persons. It occurs in young people, with a median age of 50 years (Perry et al, 2005).

ASAH is a devastating disease first described in the era of Hippocrates; about 75% of patients die or are left severely disabled from the hemorrhage. The hallmark of ASAH is onset of almost instantaneous headache; in two thirds of patients this headache is accompanied by loss of consciousness or focal deficits, and in these patients ASAH is easily recognized (De Rooij et al, 2007). However, in up to one third of patients with ASAH symptoms or signs consist of headache alone. The majority, over 70%, are diagnosed as having benign headaches (tension, cluster), migraines or RS (Perry et al, 2005).

It is especially important to recognize the patients who are alert and without deficits, because they may benefit most from early clipping of the aneurysm. An aneurysmal rupture may be suspected even if onset of headache is within minutes rather than in seconds and that other characteristics at onset of headache such as female sex, a history of loss of consciousness or focal symptoms, vomiting, and exertion cannot be used safely to diagnose subarachnoid hemorrhage (Holle et al, 2013). In 80% of ASAHs, blood from a ruptured cerebral arterial aneurysm is released into the subarachnoid space. Ten percent of ASAHs are due to arteriovenous malformations and 10% are due to perimesencephalic hemorrhages such as bleeding from small, low-pressure vessels which are associated with a good prognosis. Rare causes of ASAH are from spinal aneurysms, tumors, and spinal arteriovenous malformations. Overall mortality is 25% in 24 hours and 50% within six months. Of the survivors, 42% are left with neurologic sequelae (Perry et al, 2005).

A thorough history of headache characteristics by a physician or in the emergency room does not exclude the need for ancillary investigations -CT, and lumbar puncture if this is negative (Backes et al,2012). The brain CT should be performed in twenty-four hours from the onset of disease as the sensitivity of the examination is increased to 100% the first six hours. Besides, brain MRI might show an increased sensitivity a few days after the bleeding. A lumbar puncture is recommended in the cases with typical clinical presentation of ASAH and unremarkable brain CT or MRI (Holle et al, 2013).

**Conclusions:-**

In general practice, 25% of all patients with sudden, severe headache have ASAH. Therefore, ASAH constitutes a red flag that is required immediate diagnosis. The diagnostic dilemmas section on EPOS 2012 is important. The physicians should diagnose cases with the combination of symptomatology of RS and vascular pathology such as cerebral vascular disease. The head and facial pain present both in acute RS and ASAH. ASAH should be considered when the onset of head or/and facial pain is acute, intense and stable with no relief after medication for RS.

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