

Medical ethics, as seen in Arabic medical texts, and in practical events from the life of physicians, is an amalgam of traditional Indian wisdom, Greek philosophical thought, Christian moral teachings (the bakhtyaCw`s, Hunayn, and others), and Moslem principles and tradition.

Out of a total of more than 1000 medical books written in Arabic, only a very small fraction is available to us in print. Thus our study of these few books conveys an incomplete picture of medical ethics in Arabic medical literature, a picture that enables us to write only an introduction, not a complete analysis, of the subject.

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PS NOTE

ibn habal (1112-1213 AD) in his book "almuJtArAt", forbids the prescription of any abortifacient agent except when the woman's life is in danger during the pregnancy ; and forbids the use of any contraceptive agent except if the pregnancy or labour might endanger her life [ibn habal : almuJtArAt, Hyderabad, 1362 H (1942 AD)].

QUESTIONS-RÉPONSES QUESTIONS AND ANSWERS

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THE CASE

Mrs. I. S., a 44-year-old, presented with hoarseness, nasal congestion, and runny nose for 4 days duration. The nasal discharge is clear. Two days prior to seeing you she started having bilateral maxillary discomfort. Another physician asked for a sinus radiograph (Figure 1) and started her on cefuroxime 250 mg twice a day. Two days after the antibiotic the patient is still having the same symptoms and she is asking for another opinion. The positive findings on physical exam were : a rectal temperature of 38.1 °, wet nasal mucosa, and an erythematous throat.

The best management plan is (are) to :

- A. Make cefuroxime 500 mg every 12 hours.
- B. Shift to a fluoroquinolone.
- C. Treat symptomatically and educate her about the possible cause of the disease and its course.
- D. Order a CT scan of the maxillary sinuses as it is more sensitive and specific than a plain radiography and then decide on giving an antibiotic.
- E. C & D.



FIGURE 1
A normal radiograph of paranasal sinuses.

DISCUSSION

The diagnosis of sinusitis requires a number of symptoms and signs for a specified duration of time. Symptoms include maxillary discomfort, history of nasal purulent discharge, maxillary pain on bending forward, and "double sickening" (worsening symptoms after initial improvement) [1]. Signs of sinusitis are the presence of greenish discharge, tenderness over the affected sinus, and abnormal transillumination. The likelihood of acute bacterial rhino sinusitis (ABRS) is increased significantly if the patient presents with at least 4 symptoms and signs of sinusitis for more than 7 days. The most predictive signs and symptoms include purulent nasal discharge, unilateral maxillary pain and/or tenderness and "double sickening" [1].

A patient with less than 2 symptoms/signs of sinusitis rules out ABRS. In this case, only one of the symptoms is present (maxillary discomfort). The fact that the pain is bilateral makes it less likely to have ABRS. Furthermore, the complaints were only noted three days prior to presentation.

The radiological picture done on the patient presented is normal. Sinus radiography may be helpful when the physician is faced with a patient with 2-3 symptoms/signs. The most cost effective procedure is plain sinus radiographs. Usually one view is needed (Water's projection), which in the presence of opacity or air-fluid level (Figure 2, thick arrow) has a sensitivity of 73% and specificity of 80% [1]. Another radiological sign of sinusitis is mucosal thickening (Figure 2, thin arrow). Sinus computed tomographic (CT) scan is not recommended for ABRS. It is estimated that forty percent of adults with no symptoms have abnormal findings on sinus CT scan, and in patients with cold symptoms eighty percent may have positive CT findings [2]. CT scan is reserved for cases not responding to treatment, when complications arise, malignancy is suspected, or to define osteal anatomy.

S. pneumoniae and *H. influenzae* are the two most common organisms responsible for ABRS. The preva-

lence of *S. pneumoniae* resistance to penicillin is increasing. This resistance may be overcome by a high dose amoxicillin (one gram every eight hours) [3]. Effective second line antibiotics include amoxicillin-calvulanate potassium, cefuroxime, fluoroquinolones, and others. A dose of 250 mg of cefuroxime every 12 hours is recommended for treating ABRS [4].

Putting all together, our patient has symptoms suggestive of upper respiratory tract infection (URTI) caused by a virus (runny nose, hoarseness). The physician needs to educate her about the most probable cause resulting in the symptoms and the expected duration of this health problem, to provide symptomatic treatment, and to follow her after three days. It is too early to start antibiotic. Antibiotics are abused in patients with URTI. Although 13% of patients with URTI have ABRS, primary care physicians prescribe antibiotics in 98 percent of suspected cases [5-6].

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