

## EXCERPTS FROM PERSIAN MEDICAL LITERATURE

### PULMONARY TUBERCULOSIS AT EVIN AND QASR PRISONS

Prisoners are highly susceptible to tuberculosis (TB). This survey aimed at evaluating the status of TB at Evin and Qasr prisons in Tehran, Iran from 1998 to 1999. In this descriptive study, the target population was interviewed and subjected to physical examination, chest X-ray (CXR) and sputum examination to screen for the presence of pulmonary tuberculosis or other types of TB. A total of 6679 prisoners were examined, of whom 4,479 were from Evin and 2,200 from Qasr prisons. Male to female ratio was 4:5 and 1.1 in Qasr prison and Evin prison respectively.

Out of the 4479 prisoners at Evin prison, 15 were diagnosed with pulmonary TB, among the latter group, one case was a new sputum-positive male. In Qasr prison out of the 2200 prisoners, 15 cases were diagnosed with pulmonary TB among them, we found 5 new cases with sputum-positivity.

From 520 CXRs, 5% were compatible with TB. The prevalence of pulmonary TB in the general population during the year 1999 was 13.2 per 100,000 and for new smear-positive TB this ratio was 8.73 per 100,000. The period prevalence for smear-positive TB was 13.4 per 100,000 at Evin prison and 678 per 100,000 at Qasr prison, which were 25.3 and 51.6 times more than the general population, respectively. Special attention to the prevention and treatment of TB in prisons is strongly recommended.

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**Source:** *Journal of Medical Council of I.R. Iran.* 2001; **19**: 90-4

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### THE PRINCIPLES OF GERIATRICS IN AVICENNA'S CANON

The aim of this study was to review Avicenna's Canon on geriatric medicine and to look for the origin of this medical term, which is regarded as a very important discipline in health and medicine. Recognition of this specialty was erroneously been attributed to the scientific achievements of the second half of the 20<sup>th</sup> century. For this purpose, a complete computerized copy of Avicenna's Canon of medicine (translated by the late Abdolrahman Sharafkandi) was elaborated, and a search was carried out on related keywords of aging, geriatrics, elderly etc. We were encountered more than 500 related terms, including many current geriatric topics or titles in various chapters and main topics of this book. In addition, there was a detailed description of the issues such as healthy eating, drinking, exercise and sleeping habits of the elderly. Furthermore, other subjects such as effect of the environment on premature aging, effect of aging on the susceptibility and resistance to infectious diseases, high fevers, and fatal pains are also addressed in this book. Therefore, at the beginning of the third millennium, the principles of geriatric medicine have been presented and differences have been highlighted with regard to other eras. Considering the increase in life expectancy of our population, obvious changes occurring in the life pyramid are leading to an increase in the elderly population and in their present and future medical and health needs, it is appropriate that greater attention be paid to this important field of medicine and health (geriatrics) in our medical education and research policy at the Ministry of Health, Universities of Medical Sciences, and teaching hospitals and centers of the country, with a reference to leading ideas of Avicenna 1000 years ago and the recent emphasis made by the WHO at the beginning of the new millennium.

**Author:** Hatami H

**Source:** *Modarres Journal of Medical Sciences.* 2001; **3**: 127-37

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## ORAL TUBERCULOSIS: A CASE REPORT

Oral lesions related to tuberculosis (TB) have been sporadically reported, but the majority of them have been attributed to a secondary infection from pulmonary lesions. It is unclear whether they result from contact with infected sputum or by hematogenous spread. Herein we report primary oral mucosal infections which developed in a patient who caught the infection from a dentist with active TB. Our patient, a 50-year-old woman was referred to the Department of Oral and Maxillofacial Surgery, Dental School in Yazd with a chief complaint of a unilateral erythematous swelling of the left cheek. Physical examination revealed a swelling, 5x5 cm in diameter, which felt hard on palpation. There was no lymphadenopathy and her chest X-ray showed a few calcified lesions consistent with TB. Acid fast bacillus culture and Wright test were negative. However, tuberculin test showed an induration of 18 mm in diameter. Biopsy showed chronic granuloma with giant cells. The patient was treated for primary oral TB and showed significant improvement during follow-up.

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*Source:* *Journal of Shaheed Sadoughi University of Medical Sciences.* 2000; **8**: 71-4

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## COMPARISON OF DIFFERENT METHODS USED FOR DETECTION OF ALPHA-THALASSEMIA AND ASSESSMENT OF ZETA CHAIN BY HEMOGLOBIN CHAIN ELECTROPHORESIS

While identification of  $\beta$ -thalassemia carriers is relatively simple, the identification of  $\alpha$ -thalassemia is not as easy. The best diagnostic methods are investigations carried out on DNA and synthesis of globin chains, both of which require expensive and specialized methodologies. In Iran, carriers are usually identified through a combined set of complementary tests. Since the synthesis of Zeta chain continues throughout carrier's life, it can be used as an indicator in patient diagnosis. In 43 patients diagnosed as  $\alpha$ -thalassemia carriers or H disease, the following tests such as CBC, solubility, inclusion particles, fragility tests of RBC, cellulose acetate electrophoresis and polyacrylamide gel electrophoresis (PAGE) were carried out. The RBC count was near normal in all patients. Hb, Hct, MCV, MCH, and MCHC decreased to 95, 95, 90, 97 and 83 percent, respectively. HbA<sub>2</sub> in 81% of the patients was either low or borderline. Inclusion bodies were seen in 84% of cases, and in 85% an increase in the number of reticulocytes was observed. In 94.5% of cases the fragility test was positive. In the PAGE of the chains, 91% showed the presence of Zeta chain. Parameters like CBC and RBC do not differ significantly in  $\beta$ -thalassemia and alpha-thalassemia carriers. The fact that HbA<sub>2</sub> is normal in the absence of iron deficiency can be helpful in diagnosis. Carrying out the inclusion test is necessary to identify alpha-thalassemia carriers. With the help of the chain electrophoresis and identification of Zeta chain, alpha-thalassemia carriers can be accurately identified. It is recommended that investigation of alpha/non alpha-chain synthesis ratio and PCR be reserved as tools for definitive diagnosis.

*Authors:* Pasalar P, Khaleghian M, Sharifian RA

*Source:* *Journal of Medical Council of I.R. Iran.* 2001; **19**: 126-9

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## COMMON SIGNS AND SYMPTOMS OF PSYCHIATRIC DISORDERS IN IRANIAN CULTURE

To recognize the most common signs and symptoms of psychiatric disorders in Iranian cultural context, 4,034 adult psychiatric patients (including 2,630 males) aged 15 years and older were examined and their case notes reviewed. For registering the symptoms and signs, course of their disease and mental and physical status of individuals and prescribed drugs, a questionnaire was completed for each patient which was comprised of 894 symptoms and signs (130 physical and 764 psychological). Forty-seven symptoms and

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signs that were present in more than 30% of cases were selected and listed. Disturbances of sleep (67.3%), headache and dizziness (55.9%), restlessness (54.3%), mood relating symptoms (54.2%), and generalized pains and aches (54.4%) were the five most frequently encountered symptoms. Comparing the frequency of symptoms listed in the present examination, it could be demonstrated that there is almost no significant difference between the kind of common symptoms. Nevertheless, the mode of presentation of symptoms and verbalization was significantly different; somatic symptoms and complaints showed a higher frequency, some of which represent stand for psychological. In Iranian culture, metaphors and figurative speech also frequently used to convey psychological states.

**Authors:** Davidian H, Shahmohammadi D, Azordeghan F, Karimi I, Bagheri-Yazdi SA

**Source:** *Hakim*. 2001; 4:1

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### LEVEL OF KNOWLEDGE AND ATTITUDE ABOUT BRAIN DEATH AND ORGAN DONATION AMONG RELATIVES OF BRAIN DEAD SUBJECTS IN TEHRAN

Today, we live in a society in which thousands of patients are in the dire need of organ transplantation. A few cases of brain death occur each day. However, the view of close relatives and friends plays a major role in organ donation of brain death victims. The aim of this study was to determine the level of knowledge and attitude of the society towards brain death and organ transplantation in order to determine what measures may be taken to solve this major problem.

In this cross-sectional study, data were collected via standard questionnaires. A total of 768 subjects were randomly chosen. Data were then analyzed with SPSS software. Among the 768 persons under study, 52.6% were females and 48% were married. The mean age was 26.63 years (25.63-27.63) and the mean level of knowledge of the subjects was 84.40 (82.79-86.01) in a rating system with maximum score of 150. The mean score of the subjects' level of positive attitude towards organ transplantation of brain death victims was 164.72 (162.39-167.05) in a rating system with a maximum score of 210. Three factors including level of education, positive religious belief, and positive insight towards this problem, had a significantly positive relationship with their positive attitude ( $p < 0.0001$ ;  $r_1 = 0.3$ ,  $r_2 = 0.8$ ,  $r_3 = 0.3$ ). However, a significant inverse relationship was found to exist between the level of knowledge, positive attitude, positive religious belief (all three factors) and age ( $p < 0.01$ ;  $r_1 = 0.3$ ,  $r_2 = 0.8$ ,  $r_3 = 0.8$ ). Comparing the means, the level of knowledge of people in different educational levels showed a meaningful statistical difference ( $p < 0.0001$  and  $\text{Eta} = 0.22$ ). In addition, the mean positive attitude of persons in different occupational groups also showed a meaningful statistical relationship ( $p = 0.001$ ,  $\text{Eta} = 0.18$ ). A significant statistical relationship however, did not exist between the two mean values in respect to gender ( $p > 0.05$ ).

It seems that while the society has a positive attitude towards receiving transplanted organs from brain death donors, we cannot be sure that a person with a high-attitude score is capable of distinguishing between the brain death and the irreversible death. We can conclude that according to this attitude, a positive background is formed and the level of knowledge of the society is increased. This may be a great step forward in improving the level of acceptance of the community in this regard.

**Authors:** Rezaei S, Shakour A

**Source:** *Journal of Legal Medicine of Islamic Republic of Iran*.2000; 21: 24-28.