The turn of the 21st century saw many transformations in the health sector. The move from curative to preventive and promotive health care is strengthening and the emphasis is now on improving the quality of life. Against all the positive advancement in health care, the 21st century also witnessed an unprecedented rise in elements bent upon destroying life; among them tobacco remains the number one factor adversely affecting the health of mankind. Though the developed world has controlled its usage, to some extent through strong legislation, yet no such laws are properly enforced in developing countries. More fashionable forms of tobacco usage are being adopted to entice people. The targeted groups this time are the adolescents and youth, besieged by none other than the centuries old water pipe. Water pipe, also known as Shisha, Hubble Bubble, Narghile, Ghoza and Hookah, has been in practice for the last 400 years. The author in his book "The Sacred Narghile" stated that more than 100 million people worldwide smoke water pipe daily for hours in Asia, Europe and Africa. Its origin might be traced back to the Indian subcontinent, when a physician Hakim Abul Fath invented hukka during the reign of Emperor Akbar. This physician was of the opinion that if smoke is passed through water, harmful effects of tobacco were minimized. In the last century a decline was seen in water pipe usage and was mostly confined to older men in rural areas. Recently a global resurgence has been seen in water pipe smoking, including Pakistan, where it is commonly known as "Shisha" among the younger generation. The reasons accredited to this trend are certain misconceptions that water pipe smoking is not hazardous to health, since the tobacco is filtered through water before inhalation; nicotine content is less than that of cigarettes and addition of fruit flavours make it healthier. Another factor adding to its popularity is its social acceptability as compared to cigarettes and its portrayal is a symbol of modernization of our cultural heritage.

The extent to which water pipe smoking has penetrated our society is difficult to establish since very little work has been done on it. A recent survey conducted in high socio-economic schools of Karachi reported that Shisha is gaining popularity among the young generation and it is easily available in the restaurants, hotels and Shisha cafes. As compared to cigarette smoking it is readily acceptable and has become part of social gatherings. This survey estimated that almost 70% children have experienced this form of tobacco, including both boys and girls as young as seven years old. The tragedy is that most of these youngsters did not know that Shisha smoke contained tobacco, even though the nicotine content of Shisha tobacco has been reported as 2% to 4%, as compared to 1% to 3% for cigarettes. Its smoke also contains hundreds of potentially dangerous substances including carbon monoxide, charcoal, nicotine, arsenic, cobalt, chromium and lead. In addition, water pipe smokers might absorb higher concentrations of these toxins because of higher concentrations in the smoke itself, or because they may smoke for several hours at a time and may inhale the moisturized, less irritating smoke more deeply. A typical hour long Shisha session involves inhaling 100 to 200 times the volume of smoke inhaled when smoking a cigarette.

As compared to cigarette smoking, scientific studies of medical sequelae of Shisha smoking are scarce, but available data suggests that they are similar to those associated with cigarette smoking including lung and bladder cancers, impaired pulmonary functions, coronary heart disease, infertility, tobacco dependence and so on. Feature unique to water pipe smoking is its association with infectious diseases caused by pipe sharing and its manual preparation. The flavoured tobacco is smoked over coals and fumes from these fuels add new toxins to the already dangerous smoke, thereby contributing to the health hazards.

This grim reality calls for immediate action not only on the part of government and policy makers but also on health care providers in creating awareness against the lethal hazards associated with Shisha smoking. The following recommendations are proposed and efforts at all level are required to implement them. Some of these are also suggested actions by the WHO Study Group on Tobacco Product Regulation.

1. Shisha should be subjected to the same regulations as cigarettes and other tobacco products.
2. Shisha should contain health warnings.
3. The restaurants should inform their clients of the
actual contents of Shisha.

4. Media should be involved in creating awareness against the hazards of Shisha smoking.

5. Awareness sessions against the hazards of Shisha smoking and other substance abuses should be made a regular feature in all educational institutions.

6. Surveys should be conducted to assess the extent of the problem and its prevalence in our society.

7. Longitudinal studies should be conducted to assess the health implications of Shisha smoking.

Shisha smoking though a part of our cultural heritage is damaging the youth of our country. It is imperative to prevent our younger generation from indulging in a habit which will have detrimental effects not only on their health but also on the health of the country.

Surveillance and research into factors affecting use and cessation of this tobacco use method should pave the way for the development of effective prevention and intervention strategies to curb the burgeoning waterpipe use epidemic.

References


Original Article

Frequency of raised serum IgE Level in childhood atopic dermatitis

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Abstract

Objective: To see the frequency of raised serum IgE level in children with atopic dermatitis.

Methods: The study was conducted in the out patient department of Dermatology, “Ziauddin University”, KDLB Campus Karachi, from 1st October 2005, till 30th September 2006. Patients belonging to both sexes, aged up to 15 years, clinically diagnosed as atopic dermatitis were enrolled. The clinical severity was graded as mild, moderate and severe forms. Sera of all these patients were tested for IgE levels by ELISA.

Results: The study comprised of 124 patients, including 73 males (59%) and 51 females (41%). A total of 86 patients (70%) had a raised serum IgE level from a cut off value of 87 IU/ml. A large number of patients suffered from moderate disease (47%), followed by mild form (33%) and severe disease (20%). Serum IgE levels were divided into 3 groups i.e. upto cut off value (87 IU/ml) accounting for 31%, followed by 88 to 1000 IU/ml (41%) and 1001 to 3000 IU/ml (28%). Of the severely affected 25 patients (20%), 20 (57%) had values ranging from 1001 to 3000 IU/ml while another 3 (6%) ranged less then 1000 IU/ml (P<0.001). Of those with moderate disease (47%), 13 patients (37%) had serum IgE levels ranging from 1001 to 3000 IU/ml, while 25 (49%) had levels less then 1000 IU/ml (P=0.24). Of those affected mildly (33%), 23 (45%) had values ranging from 88 up to 1000 IU/ml and 2 patients (6%) had levels from 1001 to 3000 IU/ml (P<0.001).

Conclusion: Majority of children suffering from atopic dermatitis have a raised serum level of IgE, which in turn correlates well with severity of the disease (JPMA 57:431:2007).

Introduction

Atopic dermatitis is a multifactorial disease, resulting due to an interplay of different exogenous and endogenous factors in genetically predisposed subjects. The International Study of Asthma and Allergies in Childhood showed that there was marked variation in the global prevalence of atopic dermatitis. A child with atopy produces IgE antibodies after exposure to common environmental allergens. Type I allergy represents the genetically determined immune defects that leads to an excessive formation of immunoglobulin E (IgE) antibodies against innocuous environmental allergens in these subjects. IgE titers in turn correlate well with the severity of atopic dermatitis. Elevated serum IgE level occur in about 80 percent of patients with atopic dermatitis and are directed against a wide variety of antigens e.g. pollens,