POISONING WITH PESTICIDES: PROFILE OF CASES ADMITTED TO ATATURK RESEARCH AND TRAINING HOSPITAL'S INTENSIVE CARE UNIT

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Objective: The aim was to evaluate patients with pesticide poisoning admitted to the intensive care unit in Ataturk Research and Training Hospital in Izmir, Turkey's third largest city, between 2005–2006.

Material and method: There were 23 cases admitted to Ataturk Research and Training Hospital during the 2005–2006 period and all were diagnosed with the same descriptive qualities pesticide poisoning. All cases were taken into consideration. Information regarding the patients was obtained from their registration and case files. The research included the patient's age, sex, residential area, work, social security status, how they were exposed and why, length of stay in the hospital, clinic situation, resulting symptoms, laboratory findings such as acetylcholinesterase level, ALT (alanine aminotranferease), AST (aspartate aminotransferase), INR (International Normalized Ratio) levels and results. The evaluations for both average and standard deviations were taken and the descriptive characteristics according to percentage value were done with the datum SPSS 11.0 program.

Results: In 2005 12 cases, in 2006 11 cases, a total of 23 incidents of pesticide poisoning were admitted to the Ataturk Research and Training Hospital. The average age of the 23 cases was 31.3±11.9 years (15-68), the median value 29.0. The findings showed that 87.0% were 20 years or over, of the total cases 56.5% were women, 43.5% were men, 65.2% were farmers, 21.7% were unemployed, 8.7% were students and 4.3% were workers. Living areas were, 21.7% within the centre of Izmir, 78.3% within countryside. 59.8 % had no social security. 47.8% of the cases were admitted to the hospital during the summer months, 91.3% took the active material orally, 87.0% for suicidal reasons. 73.9% of the cases remained in the hospital for 5 days or more. 91.6% of the cases were admitted to the hospital between 17.00 and 8.00 hours. Of the patients 52.2% had acetylcholinesterase level low (3,999 µkat/l or lower), 21.7% had ALT level 35 µkat/l or over, 17.4% had AST level 35 µkat/l or over, and 52.2% had INR level 1.2 or under. Of the 23 cases 13.0% (3 cases) died. When the patients presented themselves to the hospital the symptoms most observed were an increase of secretion 91.3%, nausea 82.6%, bradycardia 78.3%, tachycardia 21.7%, perspiration 73.3%, myosis 78.3%, headache 78.3%, hypotension 73.9%, confusion 56.5%, vomiting 43.5%, respiratory failure 43.5%, tremors 39.1%, stomach pains 34.8%, diarrhea 13.0%, melaena 8.7% and haematuria 4.3%.

Discussion and conclusions: There is insufficient control on the sale of pesticides in Turkey. Especially during spring and summer those residing in the countryside are under a higher risk. Consistent with other reports organophosphorus compound, a frequently used pesticide, was the most common cause for poisoning in this series. Almost all of the patients were young adults and motive of poisoning was mostly intentional reflecting suicidal attempt in the face of stress.