

Case Report

Emergency Tracheotomy - A Life Saving Procedure in Poisoning

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ABSTRACT

The commonest poisons used in suicide in rural India include organophosphorus pesticides, other pesticides, and toxic plants such as oleander. In urban areas, recently introduced pesticides which are easily available in agricultural shops are the commonest poisons. A rising trend is being noticed of late, of household poisons, especially hair dye being commonly employed.

Characteristic features noted in three cases of suicide with Super Vasmol[®] hair dye in our hospital are discussed in this paper with emphasis on the importance of emergency measures such as tracheotomy to relieve supra-glottic oedema which is not uncommon in such cases.

Key Words: Super Vasmol[®] hair dye; Paraphenylene diamine (PPD); Supra-glottic oedema

Introduction

The purpose of this report is to suggest that, apart from the usual initial steps in the management of poisoning such as stomach wash and antidotal therapy, emergency measures such as tracheotomy may prove to be life saving in some patients.

The Case: A twenty one year old female accidentally drank a little Super Vasmol[®] liquid hair dye (**Fig 1**) in mistake for cough syrup. Immediately thereafter she developed severe dyspnoea, and her father rushed her on his two-wheeler vehicle to our hospital after initial assessment at another local hospital.



Fig 1

On examination, the Casualty Medical Officer found that the patient had swollen tongue, severe stridor, difficulty in breathing with gasping respiration. Pulse was not palpable and blood pressure was not recordable. The patient expired a little later on the same day.

Postmortem examination was done subsequently. Stomach was found to be empty. There was evidence of severe supra-glottic oedema, which had caused blockage of the respiratory tract (**Fig 2**).

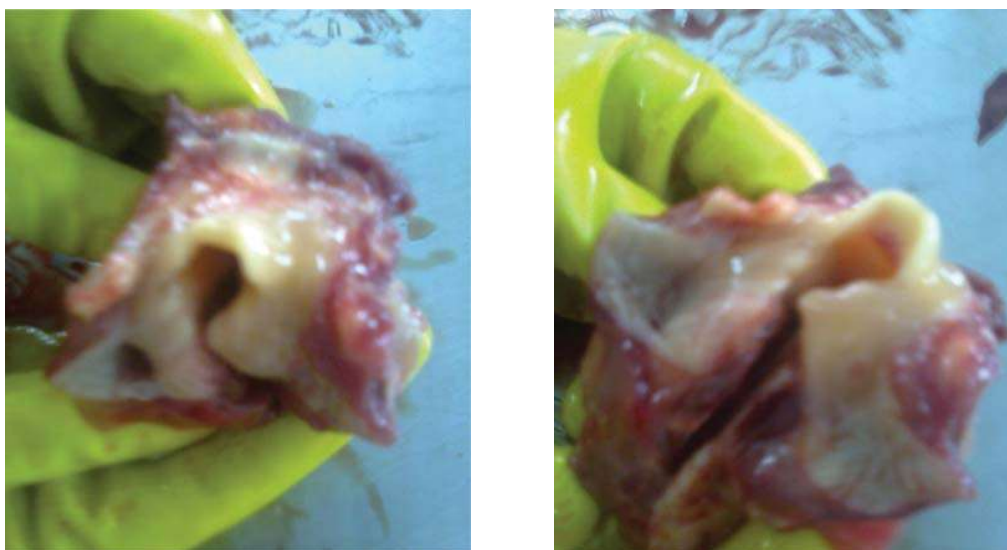


Fig 2: Supraglottic oedema

All other organs were congested. Chemical examination of the viscera yielded no result.

Discussion

The patient in this case had struggled for seven hours before she finally expired. The cause of death was respiratory tract blockage by supra-glottic oedema. It appears to have been an ideal case for emergency tracheotomy which unfortunately was not done. The Casualty Medical Officer was astute enough to have diagnosed the laryngeal oedema clinically. Had he gone one step ahead and performed the tracheostomy, he could have saved the patient.

This case was discussed in the subsequent death audit meeting. The simple procedure of tracheotomy which could have saved the life of this patient was requested to be taught to all Casualty Medical Officers which was agreed to by all the members present. The Chief Anaesthetist was instructed to make available an emergency tracheotomy kit in the Casualty at all times.

Significantly, at the next death audit meeting, physicians of the hospital informed that they had saved the lives of two victims of Vasmol[®] hair dye poisoning who had presented with similar manifestations as the fatal case, by performing the procedure of emergency tracheotomy. One of patients developed renal failure after three days, but subsequently recovered completely.

Since there is no specific antidote for Vasmol[®] which contains a highly toxic compound (paraphenylene diamine or PPD), and the treatment is mainly supportive in nature, maintenance of the air way (by emergency tracheotomy) is very important when laryngeal or glottic oedema occurs. The success rate will depend upon early diagnosis and early intervention. Hence it is imperative that this is highlighted to the medical fraternity at large in India.

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