

Rat Bite

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Abstract

A neonate and an infant were treated for multiple rat – bite over body in our institution. The infant was a neglected female and the neonate was found dumped into a garbage bin. Timely emergency intervention prevented mortality in these patients. We present these cases due to its unusual complications.

Introduction

Child abuse and neglect in our country is abundant. It is subdued due to underlying social constraints like poverty, malnutrition and infection. Dustbin, Gutters, garbage bins and railway platform are frequently used as dumping ground for deserting unwanted newborns – especially females. These are rat infested areas. Education, preventive measures and improving literacy may help save fatal outcome of rat bites.

Case Report

Case 1

Three months girl was brought to us with actively bleeding facial wound and multiple animal bites over upper extremities. She was the 4th full term normally delivered offspring of a slum dweller, residing in a rat infested area. She was immunized till date.

On general examination, there was tachycardia, tachypnoea and pallor. The child was in shock. There was a big wound of about 3 x 4 cm on the left side of nose, upper cheek and lower eyelid. It was actively bleeding. Maxillary bones were exposed (Fig. 1). There were multiple rat bites over both the upper extremities. The child was resuscitated.

Investigation showed Hb of 8.2 gm%. Other serum investigations were within normal limits. Post resuscitation the patient was taken up for surgery. The wound was cleansed and debrided and vessels

cauterized.

Daily dressing of the wound was done with eusol, salutyl and betadine ointment. Once red granulation tissue was seen decision to graft the wound was taken. A 3 x 4 cm split thickness skin graft from the patients' thigh was grafted over the wound (Fig. 2). Post-operative period was uneventful. Graft uptake after 15 days of surgery was 90-95%. The wounds over the upper extremity had also healed. Patient was afebrile on discharge.

Case 2

A 3 day old neonate was brought to us by the police. They found him from a roadside garbage bin. The neonate had multiple (uncountable) rat bites all over the body (Fig. 3). Two wounds on right thigh and left arm were bone deep. The child was brought in hypovolaemic shock (no peripheral pulses, low blood pressure and severely acidotic). He required ventilatory support for 2 days.



Fig. 1 : There was a big wound of about 3 x 4 cm on the left side of nose and upper cheek. Maxillary bones were exposed.

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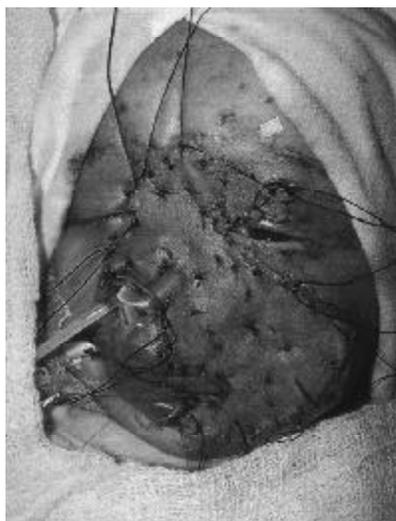


Fig. 2 : Photograph showing skin grafting done on the exposed raw area

Investigations revealed haemoglobin to be 6.2%. Blood transfusions were given. All the wounds were cleansed and the deeper wounds were sutured. The child had an uneventful recovery and was later transferred to an orphanage.

Discussion

Most animal bites are caused by domestic dogs and cats.¹ House rat bite causes bacterial infection, easily treated by antibiotics. Most of the wounds are usually wedged, clean and without subcutaneous bleeding as they tend to occur after death. Majority of rat bitten babies are females² and less than five years of age.³ Maximum bites were inflicted on face and hands and occurred between midnight and early morning.^{3,4} This was seen in both our cases.

Wide spectrum of injuries were noted in these babies including lacerations, multiple bites, strangling marks on throat, bruises, bleeding, avulsion of scalp and shock (hypothermia and hypovolaemia).² Rarely ventilatory support is required in cases of rat bite.

In our cases the injuries and complication were unusual. The neonate (case 2) had



Fig. 3 : Photograph showing neonate with uncountable rat bites all over the body.

uncountable bites over the body, very deep wounds on the extremities and required ventilatory support. The infant (case 1) had a very big, atypical wound over her face.

Child abuse and neglect, though common in India is rarely highlighted due to underlying social constraints. Low socio-economic status, poor hygiene and a rat infested environment are the social risk factors contributing to the fatal outcome in these attacks.

Preventive measures by all strata in society and health education are required to improve the outcome of rat bites.⁴

References

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