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MANAGEMENT OF HUMAN BITES OF 'FACE'

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SUMMARY

In literature human bite of the hand has received more attention than that of face. The treatment of the human bite wounds at the two sites differ. Highlighting the reasons, the principles of management of human bites of 'Face' are discussed. Representative cases are reported.

Wounds due to human bite have much greater potential for deep necrotising infections than of animal bite wound (Brandt. F. A. 1969). Hand and Face are the common sites for human bite. Several authors have discussed management of human bites of the 'hand' (Shields C. et al, 1975, Malinowski R. W., 1979, Mann R. J., 1981). The problems of human bites of the 'face' differ from those of 'hand' because of its cosmetic concern. This could usher a change in the style of management too.

In any human bite wound, Zook (1980) suggested to leave the wound open if more than 2 hours old and emphasized the need for extensive cleaning and application of loose sutures for closing the wound. For human bites of 'hand' leaving the wound open for drainage and allowing it to heal secondarily is almost a rule (Chuinard, 1977). But for management of human bites of 'face', primary concern is prevention of infection and an esthetic and functional closure of the wound (Tomasetti, 1979).

Bacterial population of any wound keeps on increasing with passage of time. Facial wound due to human bite, if closed primarily heal well due to high vascularity and collateral circulation; provided infection is prevented by suitable antibiotic cover and thorough cleaning of the wound. Secondary closure of the wound is unacceptable. In selected cases delayed primary closure can be very effective, where waiting period of 4 to 5 days offers time to evaluate the progress, watch for infection, give effective antibiotic coverage and minimize oedema.

Two of the following cases illustrate the importance of primary and delayed primary closure of human bites of face in achieving satisfactory cosmetic results. Case No. 3 illustrates the need for primary reconstruction to prevent defects and thereby psychological problems.

Case Reports

Case 1 :—A lady aged 26 years attended the casualty, 2 hours after having been bitten by the husband on right cheek (Fig. 1). She brought along a circular piece of skin and subcutaneous tissue, 2 cm. in diameter bitten off from the cheek. Under cover of intravenous Cloxacillin injection thorough cleaning of the wound, was done and the defect was reconstructed by superiorly based advancement flap. (Fig. 2). Wound healed with primary intention with minimal scarring (Fig. 3).

Case 2 :—A man aged 29 years, attended the out patient of Plastic Surgery Unit 48 hrs. after part of his lower lip was bitten off by his friend in a drunken brawl (Fig. 4). There was evidence of mild infection, oedema and loss of about a centimeter of the left side of lower lip. Culture showed Staphylococcus aureus sensitive to Cloxacillin. Within three days of Cloxacillin, therapy, Infection was controlled and oedema subsided. Wound excision in wedge form and direct closure was done on the 5th day. Wound healed with first intention. (Fig. 5).

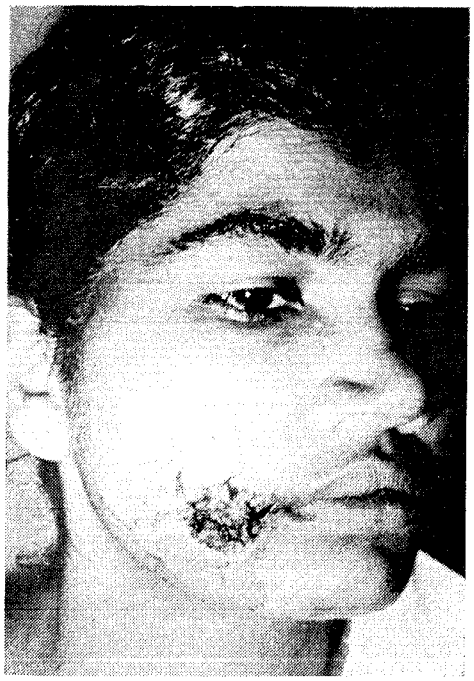

Fig. 1. Two hours old human bite wound over Rt. cheek showing tissue-loss.

Fig. 2. Primary reconstruction of the defect done using superiorly based advancement flap from adjacent cheek.

Fig. 3. Minimal scar after one month of suture removal.

Fig. 4. 48 Hours old human bite wound over lower lip showing lip loss.

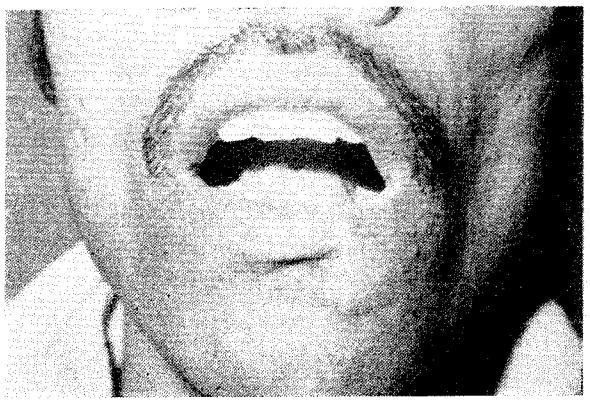

Fig. 5. Result after "Delayed primary" wound excision and direct repair of lower lip.

Fig. 6. Right alar defect seen one year after human bite wound of nose.

Fig. 7. Secondary reconstruction of alar defect done using Rt. superiorly based naso-labial flap.

Case 3 :—A 45 year old, housewife presented with a right alar defect, one year after the ala was bitten off by her husband in a drunken state (Fig. 6). She was treated in a local hospital for the wound, which healed in 10 days time leaving a full thickness defect of the right ala. Reconstruction of the alar defect was done by a superiorly based nasolabial flap folded on itself (Fig. 7).

Discussion

The problems associated with "Human bites of Face" are three fold viz. infection, soft tissue loss and mental trauma.

Alexander M. et al (1975) confirmed the presence of Penicillin resistant gram –ve organisms in human bite wounds. Unlike hand bites, rich vascularity of face allow primary healing of facial bites, provided they are surgically closed under suitable antibiotic cover. Unlike in hand wounds, massive doses of antibiotics are not used. Self inflicted human bites are relatively immune to infection (Zook, 1980) but such wounds occur on hand, never on face.

Animal bites result in deep laceration or avulsion of tissues, while human bites frequently result in tissue loss. The higher incidence of tissue loss might be attributed to the fact that only those patients report to the Plastic Surgeon when the bite is uninhibited, the aggressor being under the effect of alcohol. The loss is always of the soft tissues. Tissue loss in face is commoner and more difficult to treat than in hand. Primary reconstruction of facial human bite in all cases reporting early, would minimise the psychological problems of such patients.

The least realised problems are depression and other psychological problems, arising from the feeling of guilt, insult, embarrassment and worries about scarring persisting as a social stigma. Hence facial disfigurement due to human bite should be prevented by early definitive treatment.

Appreciating the major differences between problems of face bites and hand bites we feel the following should be the principles of managment of facial wounds from human bites (a) Hospitalisation of the victim, (b) Tetanus prophylaxis, (c) Wound swab for culture and sensitivity, (d) Antibiotic cover with normal dosage, (e) Surgical closure of wound by direct repair or reconstructive procedures. Methods and timing of surgical closure should be similar to facial wounds-closure from other causes, i.e. 1) Primary repair in all patients reporting within 24 hours, with minimal oedema. 2) Delayed primary repair in patients reporting between 24 hours to 3 days with oedema and wound contamination. 3) Secondary repair in patients reporting with clinically evident infection.

Early M. J. and Bardsley A. F. (1984) have discussed management of 48 cases of human bite face, but have not mentioned any role of "Delayed primary" closure of wound. Delayed primary closure of face wounds presenting later than 24 hours after human bite is recommended, instead of waiting for secondary closure.

Gerard M. Shannon's (1975) statement for treatment of Dog-bite injuries stands true for human bites of *face* as well i.e. "Primary repair usually results in far less deformity. If the wound should break down and deformity result, this would probably be of the same magnitude as that which would result from leaving the wound open initially."

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