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Facial Human Bites: Outcome of Primary Reconstruction.

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ABSTRACT

We have taken as our standard the definition of a human bite proposed by Tomasetti et al. (1972) namely “. . . One inflicted on a person by another person”. Of all bites that of the human animal is the worst”. (Mason quoted in 1941). This belief, once widely held, is no longer true. In this article we have analyzed 19 patients who presented to our casualty with facial human bites (of the 30 patients who presented with Human bite injury) with reference to their Age, Sex, Site of injury on their face was done. The intervention was done within 24hrs of the injury under antibiotic coverage and the outcome of the surgery – Infection rate, hospital stay, Morbidity was analysed. The infection rate in this series was only 2.5%.

Keywords: Human Facial Bites, Primary Reconstruction of Facial Wound.

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INTRODUCTION

The incidence of human bites is high in developing countries [1]. In Tamil Nadu, particularly in the southern parts, the incidence of human bites is high [1]. True incidence is unreported. Head and neck injuries most commonly occur on the ears, nose, or lips [2]. Wounds are likely to become infected. The causes for infection is Multi factorial. Saliva contains as many as 100,000,000 organisms per ml, representing as many as 190 different species. Commonly isolated aerobes include Staphylococcus, Streptococcus and Corynebacterium species. Commonly isolated anaerobes include Bacteroides and Peptostreptococcus species. Staphylococcus aureus is associated with some of the most severe infections, resulting in the highest complication rates. Transmission of disease hepatitis B, hepatitis C, herpes simplex virus (HSV), syphilis, tuberculosis, actinomycosis and tetanus [3]. Literature states that it is biologically possible to transmit HIV [4]. Human bites of the face present to the surgeon sometimes with a dilemma as to the method and timing of surgery. Ear loss whether total or partial leads to lot of social stigma and the victim hide the defect in public places. Lower lip defects can compromise the function of the oral sphincter. Nasal defects are easily noticeable and the victims find it very difficult to socialize. In this article we study the patients with human facial bites and analyse the outcome of Primary reconstruction.

Aim

To analyze the patients with facial human bites to determine the outcome of primary reconstruction.

MATERIALS AND METHODS

19 patients who attended the causality unit of Government Rajaji Hospital Madurai with facial human bites age ranging from 10-50 years from August 2010 to July 2011 were studied.

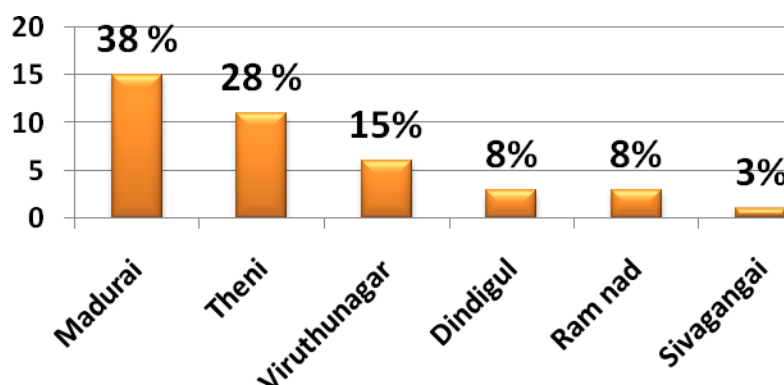
Management

Wound swab was taken for culture sensitivity. Patients were started on appropriate antibiotics. Thorough wound wash was given, anti tetanus prophylaxis was administered. In stable patients primary single staged repair was done or the first stage of staged reconstruction was done on the day of injury.

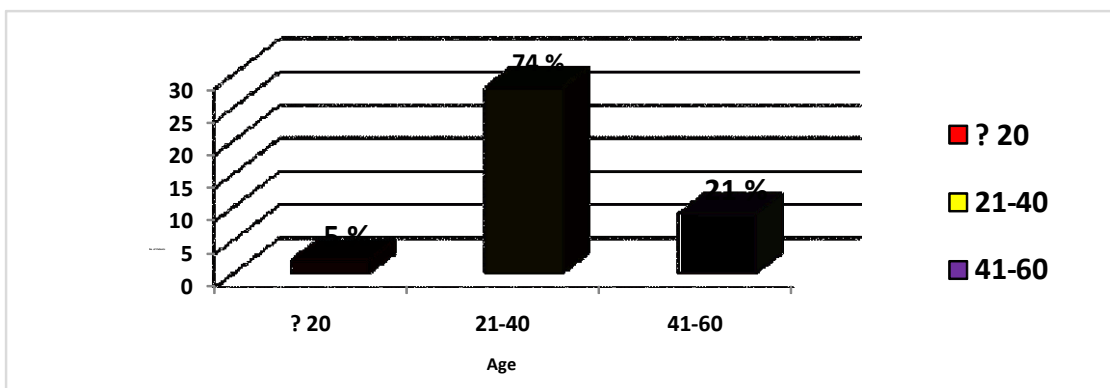
RESULTS AND OBSERVATION

In our study Madurai ranked high with human bites (38%) followed by Theni (28%) (Chart 1). The age incidence of human bites was more between 21-40yrs (70%) followed by 41-60yrs (21%) (Chart 2). The sex prevalence was more in male (95%) (chart 3). Among the 30 cases recorded with human bites 19 (65%) were on face, 5(17%) presented on the hand, 4(14%) on the thighs and 2(4%) on breast (chart 4), in the face - Ear (fig 1, 2) was the commonly affected site - 67% , followed by lip-18% (fig 3&4),(chart 5). Nose was involved only in 10% of patients (fig 5) , (chart 5,6,7).

Place of Injury Chart 1



Age Incidence Chart 2



Sex Incidence Chart 3

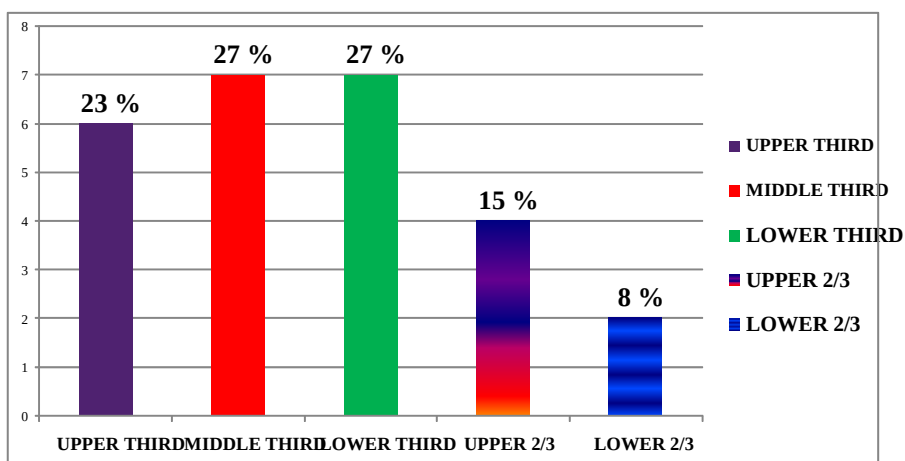
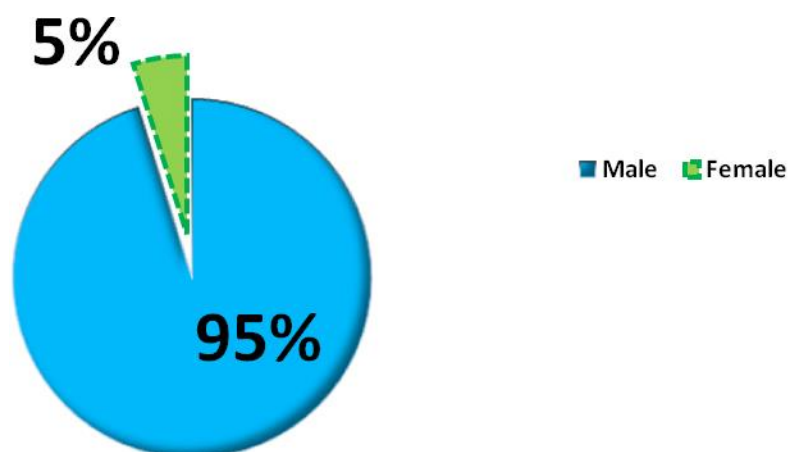
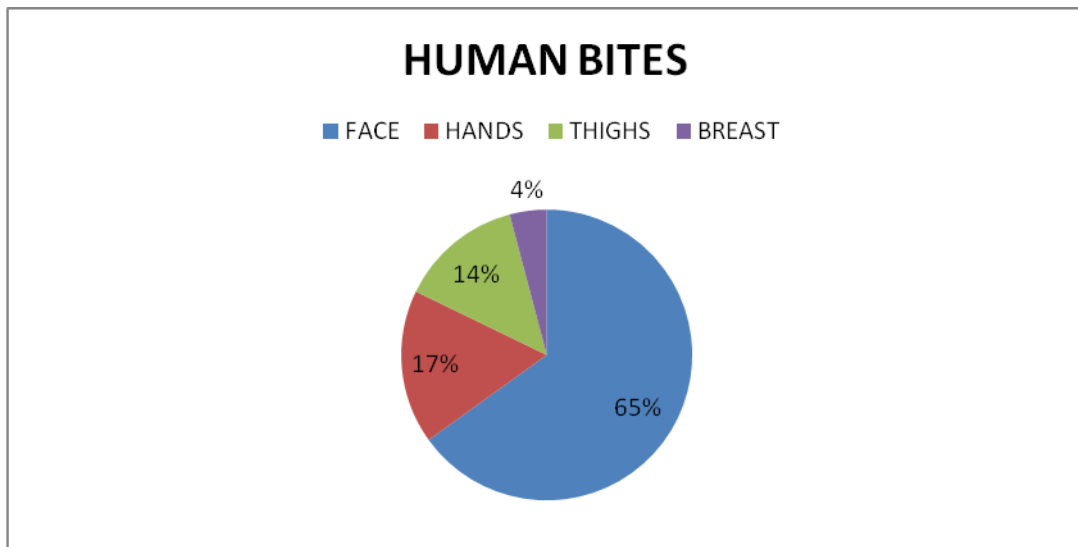
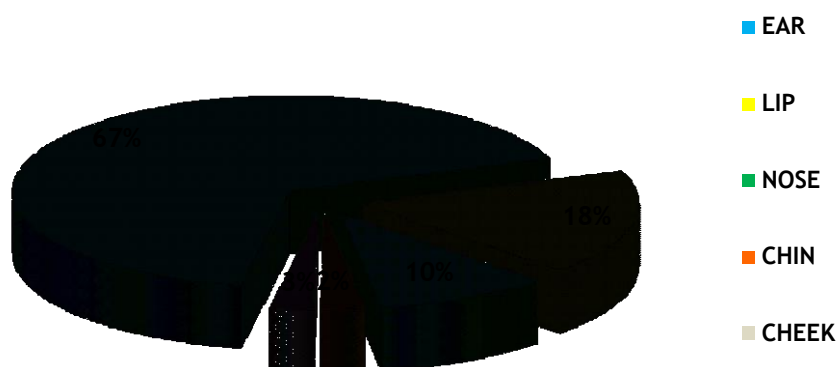


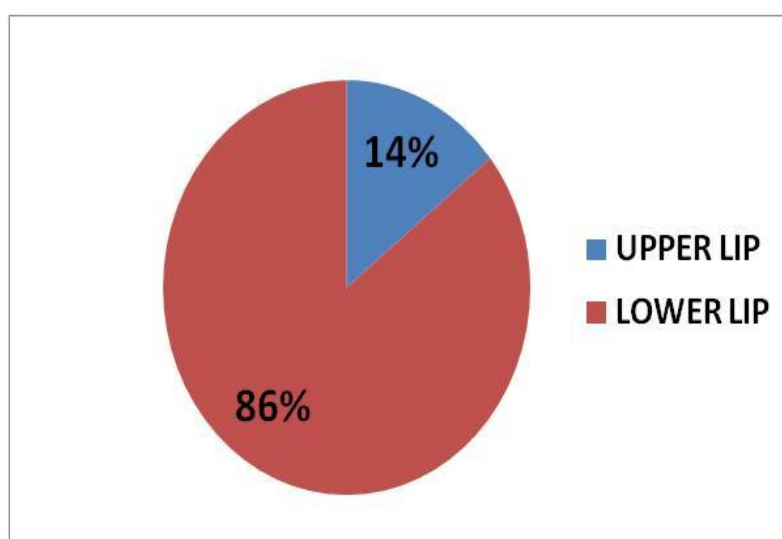
Chart 4



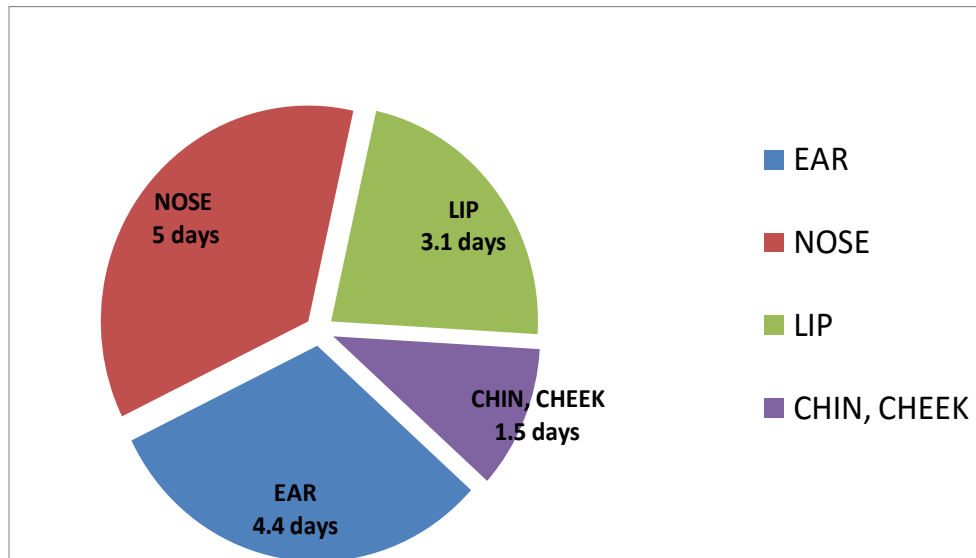
Region of Bite – Face Chart 5



Site of Bite In The Ear Chart 6



Site of Bite in The Lip Chart 7



Average Hospital Stay Chart 8



Fig 1: Sup.3rd Defect With Cartilage Loss



Fig 2: Mid 3rd Ear defect – Inf. based PA Flap



Fig 3: Lip defect – Primary Suturing



Fig 4: Stair step opposing advancement flap



Fig 5: Nose – Oblique forehead flap

All the 19 patients were haemodynamically stable while they presented to the casualty and primary repair was done for them on the same day of injury. One patient who underwent ear reconstruction with

superiorly based PA flap had distal margin superficial necrosis which was managed conservatively. The average stay in the hospital was minimal when the injury was on the cheek and chin (1.5 days) and maximum when it was on nose (5 days); (fig 5), (chart 8).

DISCUSSION

Like CRIEKLAIR et al primary repair on the same day of injury provides a good cosmetic results and infection rate is much lower (2.2%) which coincides with our study [7]. Our study coincides with the study done by Bardsley, A. F. and Mercer, D. M. (1983) where face was the commonly injured site [5]. According to Tomasetti, B. J., Walker, L., et al ear was the most commonly involved area on the face which coincides with our study [6]. Our study coincides with the study done by Boland et al the average stay in the hospital was less when the injury was on the cheek and chin [8].

CONCLUSION

Human bite wounds are notoriously deceptive and are often underestimated and undertreated. One should follow Tenets of meticulous wound care. In ear reconstruction, timely coverage of cartilage framework using local flaps prevented perichondritis and deformities.

Proper wound debridement, appropriate antibiotic along with primary reconstruction of soft tissue defect gives aesthetically better result & also plays a significant role in decreasing morbidity along with good outcome comparable to secondary repair.

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