

# Broken Thumb - Bitten by Wife

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## INTRODUCTION

Human bites are second runner-ups in terms of prevalence after animal bites<sup>1</sup>. Early treatment, appropriate prophylaxis antibiotic and surgical evaluation are the key to achieve desired treatment outcomes.

## REPORT

35 year-old gentleman presented to Emergency Department with open fracture of distal phalanx of left thumb with nailbed injury. Further history noticed that he was bitten by his wife after an argument. After preoperative assessment and commencement of antibiotic, he underwent proper wound debridement and K-wire fixation of the distal phalanx. Besides, nailbed injury was repaired with absorbable suture.



Figure 1: Open fracture distal phalanx of left thumb

## DISCUSSION

Human bite injuries may result from either, (1) the “fight bite” (when the fist strikes the teeth with sufficient force to breach the integrity of the skin), or (2) the occlusive bite injury (when the teeth closed over with sufficient force as to breach and even avulse the tissue). This case was categorized as occlusive bite injury, in which the biting teeth are usually the front incisors teeth.

Open fracture with contaminated exposed wounds requires a thorough washout debridement and antibiotics; is the current school of thought<sup>2</sup>. According to the National Antibiotic Guideline, Amoxicillin/Clavulanate is the antibiotic of choice; in view of the

common organisms are *Staphylococcus aureus* and *Eikenella corrodens*. Optimal care is mandatory to avoid possible complication such as osteomyelitis and wound breakdown. Amputation of digits and limbs are reported post human bite.



Figure 2: Pre-operative X-ray of left hand



Figure 3: Post-operative X-ray of left thumb

## CONCLUSION

Human bite is a growing public health concern. There is need to educate the society to seek treatment in order to prevent unwanted complications. Physical violence (human bite) between spouses should be appropriately addressed by professional social support to avoid future reoccurrence.

## REFERENCES

1. Cartotto RC. Managing human bite infections of the hand. *Am Fam Physician*. 1986;32:593–596.
2. Francis PH. The human bite injury: a clinical audit and discussion regarding the management of this alcohol fuelled phenomenon. *Emerg Med J*. 2007;24(7):455-458.