

## ED QUICK QUIZ

### WHAT IS THE DIAGNOSIS?

#### BACKGROUND

An 18 year old man attends ED due to a wound to the knuckle of his index finger sustained by accident when cutting vegetables

He washed the wound out himself but he is now complaining of reduced and painful movement of the finger on extension.

On examination:

He has a ragged wound over his 2<sup>nd</sup> MCP. It is swollen and slightly erythematous. He has difficulty fully extending his index finger



#### QUESTIONS

1. What has caused this wound?
2. How would you manage this?

## ANSWERS & DISCUSSION

### 1. What has caused this wound?

This is a **'fight bite'** he sustained by punching someone in the mouth last night. Patients resenting with these injuries will often either be intoxicated or evasive about how they were sustained, making an accurate history difficult. Any wound on the dorsal aspect of the MCP joint should be considered a fight bite until proven otherwise.

**Take these injuries seriously no matter how innocuous they might appear.**

These are **high force puncture wounds**. Although they may seem innocuous >50% penetrate the MCP joint, 20% injure the tendon and 17-58% injure the bone.

**Human saliva contains up to 50 species of bacteria with  $10^8$  microbes/ml.**

Up to **10% of human bites become infected**. Staph aureus and Strep spp., are the most common.

When the person sustains the wound they are likely to extend their hand allowing the entry of bacteria along the extensor tendon or deeper into the wound.

The bacteria then have a clear path to extend along the extensor tendon sheath or into the joint space potentially causing a septic arthritis or if there is a bony injury osteomyelitis risking permanent loss of function.

Because the impact may cause bleeding in the victims mouth there is potential for BBV transmission

### 2. How would you manage this?

- Thoroughly irrigate and examine
- X- ray to exclude foreign bodies/ fractures
- Elevate
- Establish **tetanus and HBV vaccination status** and give vaccines as appropriate
- IV Co- amoxiclav
- Offer to take the patient's **blood for storage** and advise them to see their **GP to arrange follow- up blood borne virus testing**
- If the source patient is known to be HIV positive AND there was blood in the saliva consider the need for PEP. If in doubt ask an ED senior.
- **Refer to Plastic Surgeons for review-** these patients usually go to theatre for washout +/- debridement. Plastics are interested in most bites distal to the wrist which have broken the skin.

**Never close a human or animal bite.**