Cat & Dog Bites – Presentation and Management





Epidemiology

Animal bites represent 1-2% of all ED attendances in the UK

Dogs - make up majority of bites, usually dominant arm or leg, male dominance.

Cat - usually upper limb, female dominance



History

How and when did the bite occur

What kind of animal was it, including breed – was it domestic, or wild – and vaccination status of animal

Was the attack provoked - consider police / social work invovlement

Mechanism of injury - bite / tearing / crushing / laceration



Cat vs Dog

Cat – often less dramatic, but due to the longer, sharper canines on cats, the wounds will be deep puncture wounds. Subsequently, are more likely to be inoculated with saliva and therefore get infected

Dog - more dramatic, but can be more superficial due to tearing motion. Tend to be crush or abrasion injuries causing more tissue damage. Consider tetanus and rabies, particularly if bite happened abroad





Examination

Document the positions, dimensions (size, width, depth) and type of wound

Check for bone, muscle, nerve, vessel, tendon involvement

Assess for neurovascular compromise

Look for foreign body involvement

Signs of infection – erythema, discharge, inflammation, tenderness, pyrexia



Initial Management

A --> E - Ensure patient is haemodynamically stable

Control any severe bleeding and remove any foreign body



Clean wound thoroughly and apply Inadine dressing (may require local anaesthetic to do this)

Infection & Tetanus

Infection – treat with Co-Amoxiclav 7 day course unless allergic or have culture result back and can give targeted Abx

Cat bites mostly get infected with Pasteurella multocida. Dog bites can become infected with variety of microorganisms such as pasteurella, staph/strep and capnocytophaga

Tetanus – high risk if the animal is in agricultural setting or routing in soil; clean puncture injuries are low risk. For high risk bites, if not had tetanus vaccine in the past 10 years, consider booster vaccine and tetanus immunoglobulin. Refer to guidelines on CEM website.

Rabies - UK is a no risk zone, only consider action if bite happened abroad

Definitive Management

Do not close wound as this will seal in any foreign material or microbes. Exception are facial wounds

Bloods to check for infection, send swabs for culture if suspicion of wound infection

Prescribe Oral Co-Amoxiclav to cover infection, 7 day course (Doxy + Met if penicillin allergic)

Analgesia as required

Arrange X-ray if you are concerned about deep tissue / bone involvement

Consider Plastics involvement if severe tissue damage

Worsening advice - onset of signs of infection / sepsis

- 1 Evgeniou E, Markeson D, Iyer S, Armstrong A. The management of animal bites in the United kingdom. Eplasty. 2013;13:e27. Published 2013 Jun 10.
- 2 https://www.cem.scot.nhs.uk/adult.html
- 3 NICE guidelines; https://cks.nice.org.uk/topics/bites-human-animal/management/managing-a-cat-or-dog-bite/

References 4 - NHS inform; https://www.nhs.uk/conditions/animal-and-human-bites/