

Stab Wounds - Guideline & Pearls of wisdom

Stab wounds – General principles

- ☐ Stabbing is a potentially lethal mechanism of injury and a high index of suspicion should be maintained in every case
- ☐ These patients should always be managed in the resuscitation room and managed according to ATLS guidelines. Deal with the life-threatening problems in an ABCDE approach.
- ☐ Remember that stab wounds may, from the surface, look unimpressive and yet overlie significant internal problems, e.g. buttock wounds causing bowel/vascular injuries.
- ☐ Record the implement used, e.g. a knife: record blade type, shape, length, and special features e.g. a serrated edge. Document the length of any wounds and accurately annotate a diagram to show where they are. It is a myth that short bladed weapons do not inflict fatal injuries
- ☐ Remember your notes will very probably be reviewed in court. Be careful of describing a stab wound or a slash wound as a laceration.
- ☐ Assault by stabbing is a dynamic situation. A wound in one position may cause injury to internal organs or tissue in an unlikely region, due to movement, body position and soft tissue compression.
- ☐ All stab wounds should be discussed with senior A&E staff and admitted under the appropriate specialty as injury to underlying structures may not be evident initially.
- ☐ Do not probe or explore wounds unless competent to do so and discourage inexperienced surgical colleagues from doing so as this is a notoriously unreliable method of assessing wound depth or severity of injury. Do not waste time exploring wound if obvious patient requires theatre.
- ☐ Where there are signs of shock and ongoing bleeding (confirmed or potential/suspected), manage with hypotensive resuscitation (fluid challenges) to obtain a radial pulse and arrange urgent definitive management. The exception is where there is an associated severe head injury where the aim should be a higher, more 'normal' BP.

Trunk Stab Wounds

- ☐ Where the wound penetrates deep fascia it should be considered to have penetrated the chest/abdomen cavities or retroperitoneal area. Do not probe deeper – it is unreliable and in the case of chest wounds may exacerbate a pneumothorax.
- ☐ Stab wounds anywhere on the trunk may cause delayed cardiac tamponade or occult intra-abdominal injury and should be admitted, after initial resuscitation, under the duty surgical team. Stab wounds between the nipples or between the scapulae are a particularly high risk for penetrating cardiac injury
- ☐ Some patients who think they are “going to die” after stab injuries have been proved right - Call a surgeon NOW and get the patient to theatre!
- ☐ In chest stab wounds, the initial CXR can be normal. Developing Haemo- or Pneumo- thoraces may not be evident on CXR taken soon after injury. A repeat CXR should be obtained 6 hrs after initial presentation to check for accumulating haemothorax, or earlier if signs of blood loss develop or initial presentation was significantly delayed. A normal CXR is therefore not an indicator for discharge and patients should be admitted for observation.
- ☐ Thoracotomy in general should be reserved for patients who arrive with signs of life and arrest, or have arrested just prior to ED arrival and have organised electrical activity on the cardiac monitor/ECG. . Pericardiocentesis may buy time until thoracotomy, but tamponade is usually clotted and requires evacuation. Consider staples and/or foley catheter for temporary closure and control.

Neck Wounds

- ☐ All penetrating wounds of the neck deep to platysma can appear innocuous and as a default require exploration by the most appropriate surgical team (plastics, vascular or ENT) in an operating theatre – not in A&E.
- ☐ RSI/paralysis for intubation in neck wounds in the presence of a large neck haematoma, especially if pulsatile or expanding, should be done in the presence of someone with the skills and equipment to perform a surgical airway / cricothyroidotomy in case of loss of airway and a “can’t intubate can’t ventilate” situation. An awake fibre-optic intubation may be the best approach if time permits.
- ☐ Avoid NGT insertion in the presence of a large neck haematoma or suspected vascular injury as straining or coughing may precipitate bleeding.
- ☐ Where possible obtain IV access on the opposite arm/side to a neck wound to avoid any potential for extravasation.

Limb Stab Wounds

- ☐ Distal pulses can be normal and swelling may not be evident for several hours.
- ☐ Stab wounds of lateral thigh frequently injure the profunda femoris artery. Such cases should be referred to the duty surgical or vascular team and may require angiography
- ☐ Limb wounds may be considered for primary closure only when it has been confirmed that there is no neurovascular deficit.
- ☐ Beware of disproportionate excessive pain – this may indicate a compartment syndrome.
- ☐ Broken bottles and glass can cause life threatening penetrating injury. If the weapon used is unknown or involves glass, remember to obtain soft tissue radiographs to rule out a retained glass foreign body, if/when the patient's clinical condition permits.

Wound closure

- ☐ In general perform a thorough wound cleaning – flush with saline and clean with betadine. If patient is to be admitted for observation, confirm with relevant specialty whether they wish the wound to be left open. Wound closure should be the default position.
- ☐ Some wounds with a significant skin defect but considered unsuitable for primary closure (possible contamination or considered at high risk of infection) may be suitable for delayed primary closure. They should have thorough wound cleaning (wound toilet/ saline flush/cleaned with betadine), non-occlusive dressing, and the wound reviewed in a couple of days.