Treatment of burn

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Treat as trauma pt : ABCD

A : airway
(in burn : may see burn around mouth and nose ,swelling and edema , secretions , soots , laryngeal edema
* if there is risk of obstruction (laryngeal edema, soot on vocal cord ,,,,this is impending obstruction) do ETT

B : breathing
in burn:
if there's associated trauma ?
full thickness circumferential burn in trunk: cause limitation of chest movement ? ((Do Escharotomy… inscion or relase))

C: circulation
(Burn pt is prone to shock)
-check Pulse, BP , may need central venous monitoring
-full thickness circumferential in limb : cause compartment (do Escharotomy , to allow blood flow)

During this time you should taking short hx and proper exam:
Hx:
-type (flame,scalp,radiation,contact,chemical,electrical)
-circumstances (associated trauma? , risk of inhalation injury-indoor or outdoor- , if chemical material? need special antidote , if electrical:need ecg, if child abuse or suicidal tendencies: need special care)
- duration ….etc

Exam: same trauma exam
(Exposure and thorough examination) .

In burn exam: find percentage and degree

Tx of burn pt either in hospital or as outpatient (according to indications)

Indications of admission (very important)

Burn tx

* There are Main tx and prophylactic tx in burn pt

Main tx are :
1- fluid
2- wound care and antibiotics
3- analgesia

1-fluid:
@ according to Parkland formula
@ type of fluid: crystalloid (best is RL if not available used any crystalloid) , avoid use colloid

@ monitoring: by urine output (PR not give accurate estimate)

2- antibiotics: topical/ systemic :

* all burn pt need systemic ?
-no , there is specific indication (for example:
- if pt has S&S of septicemia -was toxic , high fever -
- if pt has bactremia , or positive blood culture even asymptomatic

Topical : what are most common topical AB used (important Qs) :

1- Silver-sulfadiazine 1% cream:
-broad spectrum antibiotic
-good tissue penetration
-used once or twice per day according to severity of burn
-SE: soft tissue destruction or necrosis (or ulceration) , cause psedu-eschar, neutropenia

2- Mafenide (sulfonamide) cream :
-broad spectrum antibiotic
-used once or twice per day
-better tissue penetration (more than 1) , so usually used rather than hamazine in cartilage burn (infection) [like burn in ear ,nose]
Or resistance, or have pt allergy

-SE: has serious SE is metabolic acidosis (bzs has carbonic anhydrase inhibitors) especially if used in percentage more than 30%
(So if burn percentage more than 30% : avoid it)

3- Sliver nitrate 5% solution :
- broad spectrum
- it's fluid, so should do irrigation to site every 4 hrs (so it's difficult for pt and staff, while 1 and 2 : one or two per day so more easier)

-SE: black staining for bed and clothes

4- Other antibiotics: Fusidic acid acid (fucidin) , neomycin….etc
(Used in less severe burn and if there's contraindications to others)

3. Analgesia :

* should be give analgesia (bzs it's severe pain , even cause depression and make pt refused change of dressing)

* used : paracetamol,tramadol , pethedine, morphine, even short acting stronge analgesia (like fentanyl)

4- nutritional support :

Prophylactic management

1- Anti-coagulant (prophylactic dose of LMWH, give 2000-3000 IU subcut) : if pt obese , bed redden , other risk

2- PPI (risk of stress ulcer)

3- Psychological support (if suicidal attempt)

4- Physiotherapy (pressure or bed ulcer if pt was not moved or rolled on bed)
And if burn in joint : risk of stiffness or contracture : also need physiotherapist moved him

This above is medical management of burn

Surgical mx of burn :

Indications of sx in burn :

In acute stage:
- compartment
- tissue necrosis
- third degree burn
- every burn pt show no signs of wound healing (from 3 days to 3 wks)

Tx : excision and graft

In late stage :
- contracture (especially in hand , and joint)

Tx: need release and graft (or flap : according to case)