Vascular Emergencies due to IV Drug Use: Tips and Tricks for Management

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Heroin Epidemic

Stein task force to tackle heroin epidemic in Seattle, King County

"In the state of Washington, heroin is the number one drug threat!"

SUSPECTED INFECTED FEMORAL ARTERY PSEUDOANEURYSM

STEP 1: IMMEDIATE ACTIONS
- Evaluate for signs of sepsis/hemodynamic instability/acute limb ischemia
- Absence of constitutional symptoms, pulsatility, leukocytosis, or negative blood cultures DO NOT rule out IFAP
- Obtain IV access
- Labs: CBC, BMP, Blood Cx, Coags
- Obtain ABIs
- Initiate broad spectrum antibiotics including coverage for MRSA, Streptococcus, and Gram negative rods

STEP 2: IMAGING:
CTA with run-off

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NO BEDSIDE I&D for suspected abscess
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STEP 3: SURGICAL MANAGEMENT
1. Vascular control
   SUSPECTED INFECTED FEMORAL ARTERY PSEUDOANEURYSM
   Hybrid approach
   Balloon occlusion
   Open Procedure
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STEP 3: SURGICAL MANAGEMENT
1. Vascular control
2. Debridement to healthy artery
3. Arterial ligation
4. Vascular Coverage

STEP 4: POST-OPERATIVE MANAGEMENT
- ICU admission with hourly neurovascular exam in the immediate post-operative period
- ID & Pain Service Consult
- Antibiotic therapy based on intra-operative cultures and bacteremia/endocarditis
- Rule out DVT
- Evaluate for possible comorbidities including HIV, HBV, HCV, endocarditis

Post Op Care

| Bacteremia on admission | 27 (50.9) |
| Bacteremia organism |
| MRSA | 20 (37.7) |
| MSSA | 10 (18.9) |
| Enterococcus Faecalis | 1 (1.9) |

Post-operative ABI median (range) for all 65 patients:
- Triple arterial ligation: 0.41 (0.25-0.64)
- CFA Ligation: 0.36 (0.25-0.69)
- Post-operative Amputation Rate: 6% (4 patients)
Conclusion

• Vascular emergencies due to IVDU are increasing
• Femoral artery ligation is usually well tolerated
• We avoid immediate revascularizations
• Amputation rate is low
• ID and Pain Service collaboration is essential