Cutaneous Surgery: Practice Gaps & Best Practices

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Learner Objectives

• After this presentation you should:
  – 1) understand the rationale for perioperative anticoagulation medication management
  – 2) understand tactics to decrease patient anxiety during procedure
  – 3) understand risks and benefits of postoperative pain management medications and topical agents
Cutaneous Surgery

• Skin cancers – mainly non-melanoma
• Benign skin tumors and growths
• Sebaceous cysts
• Cosmetic procedures – e.g. upper blepharoplasty
• Scar revision
• Other “skin” related procedures (ear canal, lip lesions, etc.)

Overview of Practice Gaps

• Cost effectiveness and safety
• Use of anticoagulant medication
• Lidocaine dosage
• Injection angle of lidocaine
• Use of music during cutaneous surgery
• Use of anxiolytics during cutaneous surgery
• Postoperative pain control
• Postoperative topical antibiotics
Practice Gap #1
IS CUTANEOUS SURGERY PERFORMED UNDER LOCAL ANESTHETIC SAFE AND COST-EFFECTIVE?

Safety
• Study by Alam et al - >20,000 cases in 23 centers for Mohs cases
  – Minor postop complication 0.72%
    • Bleeding, infections, impaired wound healing
  – Serious adverse events 0.02%
    • Requiring hospitalization – no permanent disability or death

Cost Effectiveness
• “Clean surgical technique”
  – Clean, non-sterile gloves, clean towels, and sterile instruments
  – Large RCT’s would suggest that infection rate was similar to sterile technique
• Office-based procedure vs. ambulatory surgery center (or hospital)
Anticoagulation Medication

- Use of anticoagulation medications increases risk of bleeding which may result in hematoma, flap/graft necrosis, infection, and trip to ED/Urgent care
  - Clopidogrel > warfarin > ASA
- However… No studies to date have reported serious or life-threatening bleeding after cutaneous surgery
Anticoagulation Medication

- Recommendation: Do not halt anticoagulation medication for cutaneous surgery
  - Bleeding is a nuisance but can be controlled
  - Complications associated with bleeding are rare and rarely serious
  - Thrombotic events related to discontinuing anticoagulation medications can be serious or life-threatening

Practice Gap #3

WHICH LOCAL ANESTHETIC SHOULD BE USED AND HOW SHOULD IT BE ADMINISTERED?
Local Anesthetic

- Mean pain level is 3.7 out of 10 point scale
  - Higher in periorbital and nose areas
  - Some cumulative effect – longer cases and more injections associated with increased pain
- 1% lidocaine with 1:100,000 epi
  - Should be your workhorse/default solution
  - Safe, good pain control, can be injected throughout facial/neck skin

Local Anesthetic

- Injection tips
  - Inject slowly
  - 90 vs 45 degree angle
  - Less injection energy
  - Less distention of tissue
  - Less nerve transection?
- Warm solution
- Pre-injection skin prep
  - Ice, topical meds
  - Use of bicarb mix

Practice Gap #4

HOW CAN PATIENT ANXIETY BE REDUCED?
Reducing Anxiety

• Increased anxiety associated with ↑BP, ↑risk of syncope and bleeding
  – Negatively influence patient experience and future desire to seek care
• Best ways to reduce anxiety are “obvious”
  – Talk to patient!
  – Be calm, be friendly, be confident
  – Create an atmosphere that is calming

Reducing Anxiety

• Use of anxiolytics
  – Oral midazolam within 20 minutes of procedure at 5-10mg dose
    • Best studied medication with RCT’s
  – Other options: diazepam 5-10 mg, alprazolam 0.5 mg

What About Music?

• Famous music quotes:
  – “One good thing about music, when it hits you, you feel no pain.” — Bob Marley
  – “Music is the wine that fills the cup of silence.” — Robert Fripp
  – “Music hath charms to soothe the savage beast”— William Congreve
Reducing Anxiety

• The magic and power of music
  – Thought to reduce patient awareness of bothersome stimuli including sound and smell of electrocautery
  – RCT demonstrates personalized music improved anxiety scores!
    • Also found reduction in surgeon anxiety as a whole

Practice Gap #5
HOW SHOULD POSTOPERATIVE PAIN BE MANAGED?
Opioid Abuse

The epidemic of opioid misuse, overdose, and death is a multifaceted crisis that requires partnership across sectors to respond with effective health care and public safety strategies.

Pain Management

• Average peak postoperative pain range from 1.5 to 2.0 on a 10 point scale
  – Increased pain associated with scalp procedures, conchal cartilage graft, female gender, anxiety toward pain, younger age (<66 years age), flap repair

• Overall, pain level is low for cutaneous surgery – should strive to avoid opioids
  – RCT demonstrated acetaminophen and ibuprofen combination was more effective than acetaminophen alone or acetaminophen with codeine
  – Another large cohort study demonstrated more than 50% required no pain meds at all
Pain Management

- Harris et al study, JAMA Derm, 2013
  - 35% of patients given prescription for opioids did not fill them
  - 86% of patients who filled prescription had leftover pills
  - Most patients planned to “save” the extra pills

Practice Gap #6
WHICH TOPICAL AGENTS ARE APPROPRIATE AFTER CUTANEOUS SURGERY?

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Topical Agents

- Rate of postoperative infections low – 0.07 to 4.25%
  - Multiple RCT’s demonstrate that topical abx do not reduce postop wound infections, improve wound healing, or increase patient comfort and satisfaction
  - Downsides: increase antibiotic resistance, allergic dermatitis and inflammation
    - General patch test population allergy: neomycin (11%), bacitracin (8%)
      - Polymyxin B and mupirocin were within normalc

Topical Agents

- Best Practice:
  - Use Aquaphor Healing Ointment or white petrolatum
  - Multiple studies have demonstrated positive outcomes compared to no topical agents and antimicrobial agents
    - Decreased erythema, swelling, crusting, and discomfort

Summary
Reception at Kohler Design Center

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