BURN SURGERY EDUCATION
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Introduction
- DGG – Burn Representative to the Trauma, Burns, Critical Care Board (TBCCB) of the American Board of Surgery (ABS)
- Theme of January 2014 ABS retreat – surgical education
- **Goal** – provide my insights to current themes of TBCCB/ABS and their relationships to the ABA
- *Focus on surgical training only*

Areas of Focus
- General surgery residency training
- Plastic surgery residency training
- Burn surgery fellowship
  - Critical care issues
  - Noncritical care issues
Charge of the ABS

- “Serve the needs of the public”
- We (ABA) need to ensure that burn surgeons are adequately trained
- What are the “standards of competency”? 
  - Surgeon must be able to practice independently
- Setting standards – If we don’t do it, someone else will

Surgical Training

- Three essential components
  - Perioperative assessment and management
  - Technical operative skills
  - Long-term aftercare
- Burn training should fit into these categories

General Surgery Residency

- Many different structures being discussed
  - “General” surgery
  - Trauma/Acute Care Surgery (ACS)
  - Vascular
  - Thoracic
  - Oncology
  - Endocrine
  - Minimally invasive
General Surgery Residency

• Burns experience is no longer required (but burn knowledge is expected)
• "Knowledge" of burn care lost outside burn centers
• But – most burns are small – treated elsewhere
• Result – poor care of small burns
• (Should we study basic burn knowledge?)

Plastic Surgery Residency

• Burns not an emphasis or not required
• Acute burn care is not a focus but many plastic surgeons manage burns
• Burn reconstruction surgeons are needed but less exposure than other subspecialties
• Burn reconstruction not as lucrative/attractive as other sub-specialties (cosmetics)

ABA Action Items

• Push for burn experience – at least in the “trauma/acute care surgery” tract
• Push for acute burn experience in plastic surgery training
• Push for making ABLS a requirement for surgical residents?
  • (ATLS is currently on surgical residency curriculum)
• Ensure that basic burn knowledge is included in the In-Training, Qualifying and Certifying examinations
Fellowships and the ABS

• Trend – more residents entering fellowships (feel less prepared?)
• Statistics
  • 48% enter non-ACGME fellowships
  • ~25% enter ACGME-sponsored fellowship
  • ~25% enter practice

Burn Surgery Fellowships

• Important issues
  • Critical Care Certificate is essential
  • Burn centers provide superb critical care experience
  • Limited number of burn surgeons trained per year (but maybe enough)
  • Interest seems to be increasing (8 applicants)
  • Limited needs for burn surgeons
  • Careers can vary
    • Full-time burns (only a few places)
    • Part-time burns (trauma, acute care surgery, plastic surgery)

Burn Surgery Fellowships

• Essentially Four Tracts
  • 1 year burns eligible for critical care
  • 1 year trauma/ACS with burn experience eligible for critical care
  • 1 year burns not eligible for critical care (plastics)
  • 2 years – 1 year burns, 1 year trauma/critical care eligible for critical care
One Year Burns/Critical Care

Pros
- ABS and ACGME support 1 year fellowship with eligibility for critical care (Galveston, Seattle, others)
- Eligibility based on individual program application
- Desired by many candidates (one year – done)
- Eligible for critical care certificate

Cons
- Requires "electives"
- Limits burn experience – is 8-9 months enough?
- Little reconstructive experience

One Year Trauma with Burns

Pros
- Eligible for critical care certificate
- Exposure to burns
- For "blended" trauma/burns/ACS/critical care career

Cons
- Not enough experience for burn surgery as main focus of career
- Training program might not have enough exposure to difficult burn problems

One Year Burns without Critical Care

Pros
- Not all trainees interested in critical care – especially plastic surgeons
- Other systems have separate surgeon and intensivist roles (Europe, Asia, Australia, Africa)
- Education is not diluted with "electives"

Cons
- Critical care knowledge is an essential component of burn care
Two Years – Burns and Critical Care

Pros
- More expansive training in both arenas
- Burn training may require more than 8 months
- Broad training in trauma/critical care/ACS
- Desired by many

Cons
- Requires 2 years – often not desired
- May push people away from burns

Fellowships and the ABS

- ABS has Advanced Surgical Education Committee (ASEC) – oversees non-ACGME fellowships
- Luchette representative of TBCCB
- ACSE – could sponsor a burn fellowship certificate
- Need co-sponsor (AAST for Acute Care Surgery)
- Critical Care Certificate would not change

Burn Fellowship and the ABA

- Curriculum
  - Already been created by ABA ad hoc committee (Gibran, Sheridan, Kealey, Greenhalgh)
  - Used for Seattle fellowship (approved by ACGME)
  - Allows for critical care eligibility
Burn Fellowship and the ABA

- ABA should be the sanctioning organization for burn fellowships
- ABA should provide certificates for burn training
- Critical care eligibility independent of ABA (sanctioned by TBCCB of ABS)
- ABA should create training “milestones” (Education Committee?)

Burn Fellowship and the ABA

- Review of fellowship programs
  - All fellowship programs must be in Verified Burn Centers
  - Review part of every 3 year Verification visit
  - Certificate approved by ABA and ASEC (ABS)
  - Critical Care eligibility overseen by ACGME/TBCCB of ABS

Outcomes of Fellowship Training

- Burns as sole practice
- Burns with trauma/critical care
- Burns with acute care surgery/critical care
- Burns with plastics/reconstructive surgery
- Trauma/acute care surgery/burns
- Plastics with burns/reconstructive surgery
- Critical care with burns
Conclusions

- Burns needs to be a component of surgical and plastic surgical residency training
- Burn training and standards should be overseen by the ABA in conjunction with the ABS (TBCCB)
- A burn training certificate should be created by the ABA in conjunction of the TBCCB/ABS
- Training should only occur in Verified Burn Centers
- Oversight should be part of Burn Center Verification Review