5-year Retrospective Review of Octogenarian Appendicectomies

Royal Sussex County Hospital, UK
Appendicitis is not common in the elderly. The elderly are associated with accompanying comorbidities, and, higher mortality and morbidity rates, leading to higher risk when undertaking emergency surgical procedures. Octogenarians often have atypical presentations.
Objectives

- Establish consistency of features within the history and findings to the diagnosis of appendicitis
- Establish the role of pre-operative imaging studies
- Guidance as to which incision to use
Methods

- 5-year retrospective review
- Including ≥ 80 year olds presenting within the period of May 2005 – 2010 (n = 33)
- Patients identified from histology samples sent and the emergency surgery database
- Excluded patients were those where the appendix was removed as part of another primary procedure
Results
Demographics

- Age: 84.96 ± 4.54 (M±SD)
- Sex: 17 males, 16 females
- ASA grade:
  - 1: 1
  - 2: 18
  - 3: 12
  - 4: 2
Presenting Symptoms

- Migratory pain
- Anorexia
- N+V
- RIF tenderness
- Rebound tenderness
- Pyrexia
- Leucocytosis
- Neutrophilia
Imaging

- 48% pre-operative CT imaging:
  - 87.5% (14/16) confirmed acute appendicitis

- 6% (2/33) pre-operative US imaging:
  - Nil confirmed acute appendicitis
Surgical Methods

(A)

- Open: 30
- Laparoscopic: 1
- Converted to Lanz incision: 2
Appearances

Macroscopic Appearances:
- Normal
- Acute Appdx

Microscopic Appearances:
- Acute Appdx
- Malignant/ Premalignant
Post-operative period

- Mortality rate: 3%
- Morbidity rate: 64%
- Average length of stay: 11 days (1 – 48 days)
- Post-operative complications:
  - Wound infection 54.4%
  - Pneumonia 15.2%
  - ITU admissions 6%
Conclusions

- Where pre-operative CT scan had been obtained, more likely to have used a smaller incision (including laparoscopic, Lanz or Gridiron) = 10/16 (62.5%)

- Longer length of stay where midline laparotomy incisions were used

- Longer length of stay noted where macroscopic appearance of appendix was gangrenous
  - mean = 13 days, median 8.5 days

- Higher rate of perforation or necrotic appendix in this age group (61%)
Recommendations

- Where appendicitis is considered, CT scanning is a good modality of imaging to confirm diagnosis.
- When approaching appendicitis in this age group, despite increased morbidity rates, Lanz/Gridiron incisions continue to be feasible options as an open approach with shorter hospital stays.
References

- Storm-Dickerson TL et Horattas MC. What have we learned over the past 20 years about appendicitis in the elderly? Am Journal of Surgery, March 2003, 185/3(198-201).
Thank you

ANY QUESTIONS?