

# Tropical Pyomyositis – maybe not so tropical?

Becky Beamish

M Thiart, M Tebruegge, S Patel, A Aarvold  
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# Pyomyositis

- Scriba 1885 - *'an infection of the muscle leading to abscess formation'*
- Rare
- Tropical
- Trauma
- Panton-Valentine leukocidin (PVL)
- Children, young adults

# Study Aims

- Relatively large numbers treated in Southampton
- Elucidate patterns or trends in pyomyositis
  - Improve understanding and management

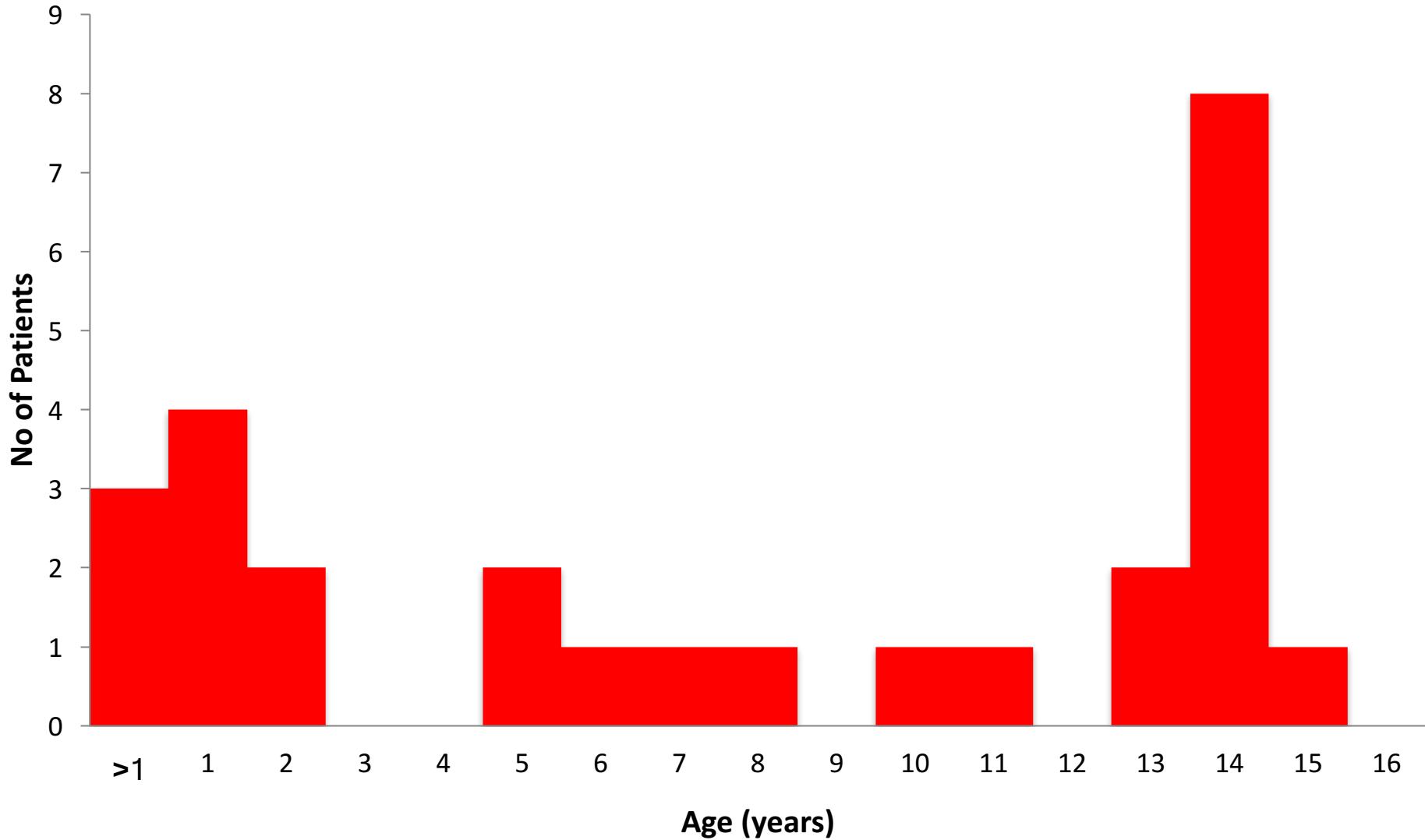
# Methods

- Retrospective review
- 8 year period July 2008 - July 2016
- Infectious diseases database, plus electronic records
- Search: 'pyomyositis', 'myositis', 'muscle abscess'
- Sx, blood tests, micro, imaging, surgery, abx
- Stats – Microsoft Excel

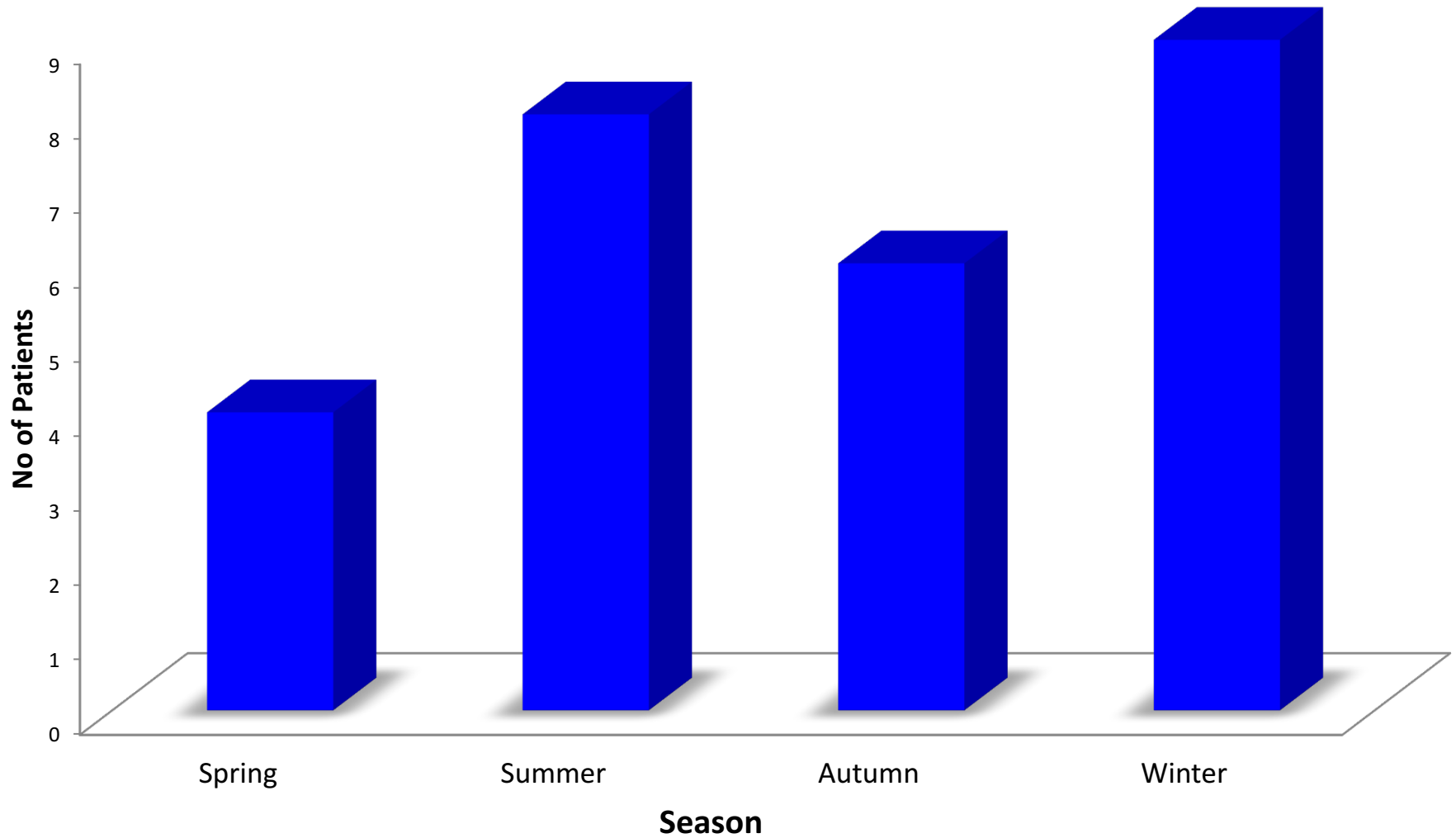
# Results

- 27 patients
- M:F 1.1:1
- 4 with co-morbidities
- 3 (11%) could recall preceding trauma
- Diagnosed by MRI in 89%, U/S in remainder

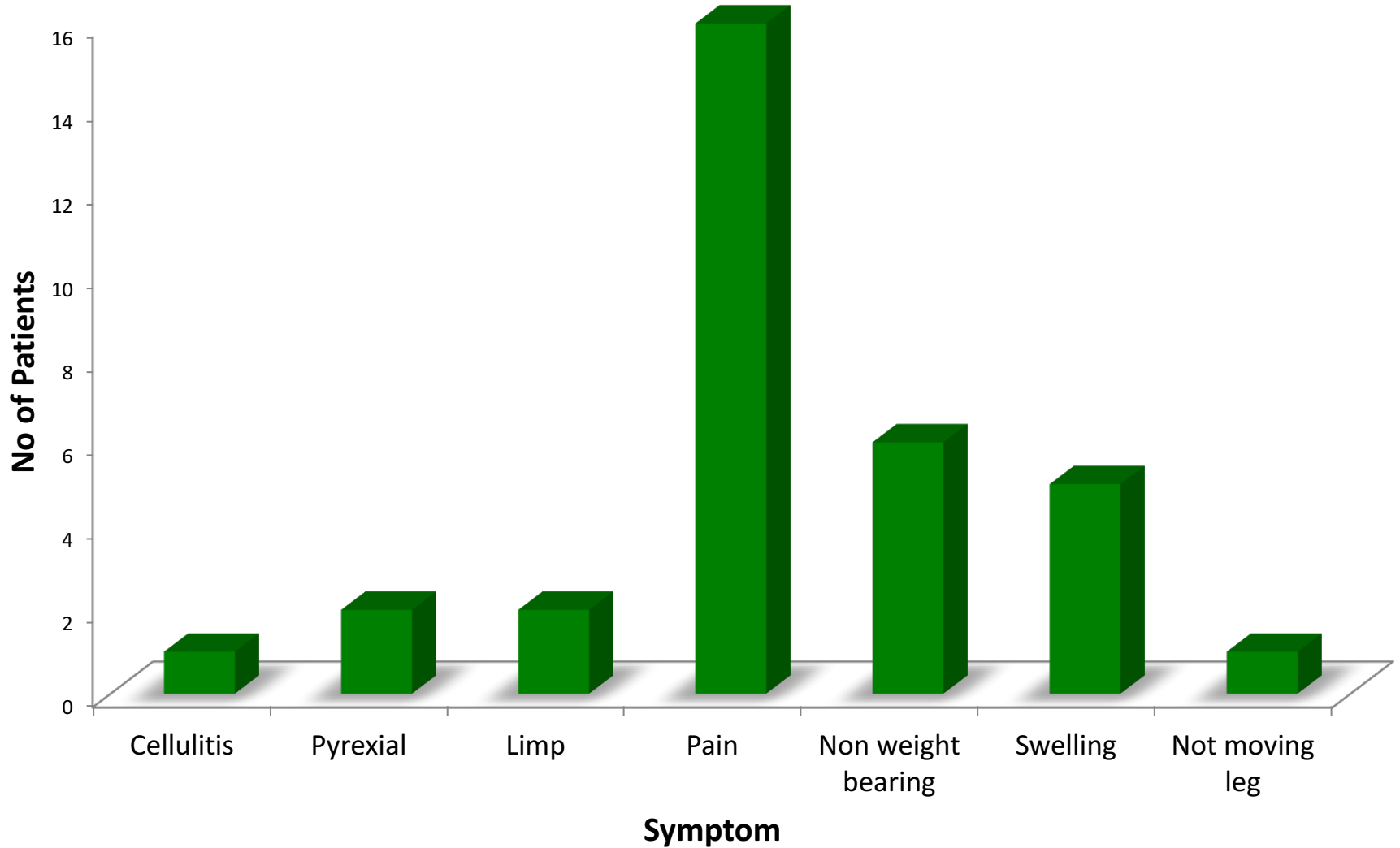
# Age at Presentation



# Presentation by Season

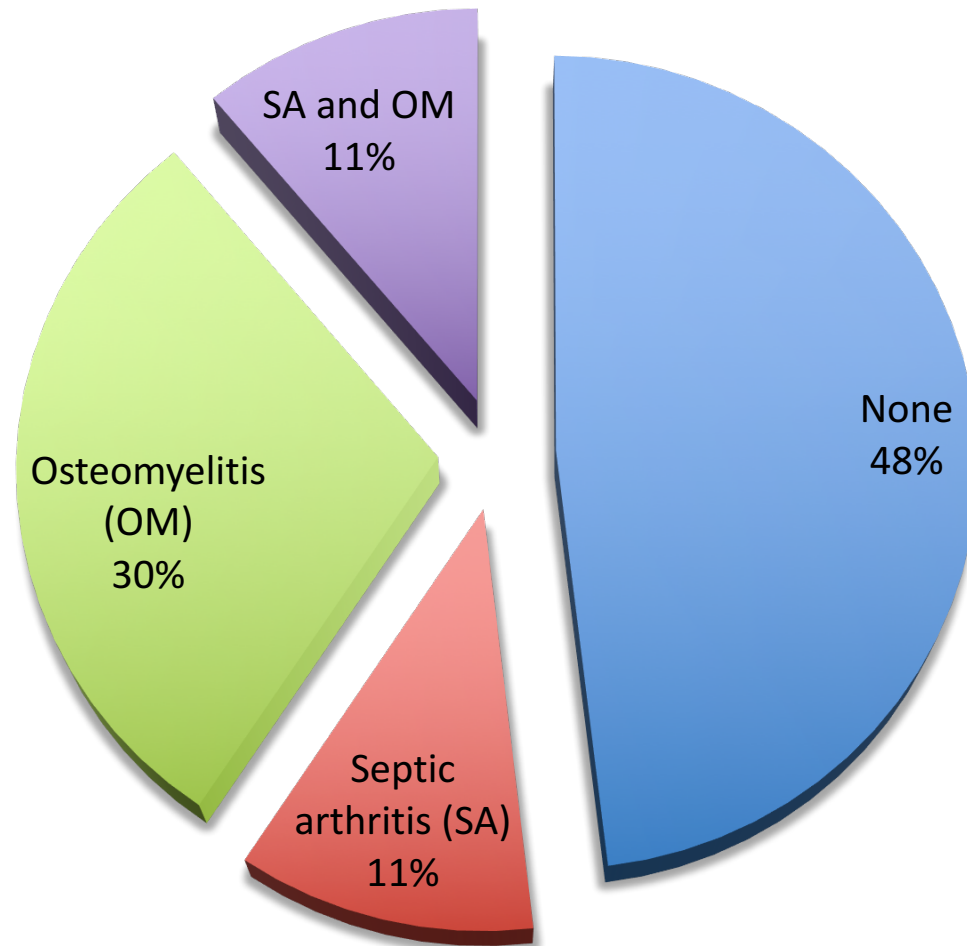


# Presenting Symptoms





# Associated Infections



# Microbiology

- BC done in 22/27
- 17 were positive – 15/17 (88%) +ve for *S. aureus*
- 4 PVL positive

# Surgery

- 13 patients (48%)
  - 4 – pyomyositis only
  - 9 – associated infections

# Panton-Valentine Leukocidin Positivity

- Higher CRP:
  - 348 vs 159 ( $p=0.043$ )
- More than 1 surgical procedure:
  - 100% vs 18% ( $p<0.001$ )
- Longer abx duration:
  - 75 days vs 41 days ( $p=0.017$ )

# Summary of Findings

- 27 patients. Peak at 1 and 14 yrs.
- Presentation – pain, NWB, swelling, limp
- MRI required for diagnosis in majority
- Associated infections (SA or OM) common
- Microbiology: PVL +ve: higher CRP, more surgical washouts, longer abx

# Conclusion

- Largest UK series in literature
- 'Tropical pyomyositis' does occur in temperate England
- No assoc with trauma
- MRI facilitates early diagnosis
- Suspect associated SA or OM
- Culture and anticipate:
  - PVL +ve = more virulent infection