Triage of sepsis patients: SIRS or QSOFA – which is best?

N Gunn; C Haigh; J Thomson
Emergency Department, Victoria Hospital, Kirkcaldy
SIRS

- Screening tool in the ED to identify patients with severe sepsis
- International Consensus Definitions
- 4 components:
  - HR> 90, RR>20, WCC >12 or <4, temp >38 or <36
qSOFA

• Recent Sepsis 3 definition
  • SOFA and qSOFA
• Identify patients at risk of requiring critical care and in hospital mortality due to sepsis
• 3 components:
  • RR≥22, SBP≤100, Altered mental state (GCS<15)
Methods

- Review 200 ED patient over 6 months
- SIRS and qSOFA scores calculated and compared
- Patients who required critical care input and those who died were noted
Results

- 109 male, 91 female
- Age range 18-95yrs
- 4 admitted to ICU, 17 to HDU
- 22 deaths in total
  - 1 ICU with full escalation
  - 8 HDU with decision for no escalation to ICU
  - Of those who died out with critical care, 8 had a decision of ward level ceiling of care made in the ED
• 195 cases SIRS positive
  • 4 admitted ICU
  • 16 admitted HDU
  • 22 died
• Identified all patients who died and all but 1 patient who received critical care input
• 97% sensitive but only 2.4% specific
• PPV 15.9%, NPV 80%
qSOFA

- 29 cases positive
  - 1 admitted ITU
  - 9 admitted to HDU
  - 9 deaths
    - 5 patients on HDU
    - 4 patients identified were not for escalation of care
- 90% specific for identifying patients who died or required critical care but only 48% sensitive
- PPV 42%, NPV 92%
Conclusion

• qSOFA more specific test
• SIRS more sensitive but lacks specificity

• Practically, SIRS can be used as triage tool to identify potentially septic patients but once identified qSOFA can be used to identify patients requiring critical care
Thank You
Any Questions