NATIONAL AUDIT OF MENINGITIS MANAGEMENT (NAMM)

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Poster DT15

BIAMM British Infection Association

Meningitis Research Foundation

NITCAR National Infection Trainee Collaborative for Audit and Research

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- Bacterial meningitis in the UK is now a rare entity.
- Early recognition with prompt investigation & management is critical to improve outcomes.
- In 2016 the UK joint specialist societies' published guidelines on the diagnosis and management of acute meningitis.
- To review the management of community acquired bacterial and viral meningitis in the UK
- NAMM audit teams were recruited nationally via the NITCAR network.

NITCAR
National Infection Trainee Collaborative for Audit and Research

METHODS:

Inclusion criteria:

1. Adults (≥16 years) presenting to hospital in 2017
2. Patients with a CSF WCC >4 x10^6 cells/L & a clinical suspicion of meningitis.
3. In the case of bacterial meningitis symptoms and signs of meningitis with a significant pathogen in the CSF (culture or PCR) or blood regardless of CSF leukocyte count.

Exclusion criteria:

1. HIV associated meningitis
2. Tuberculous meningitis
3. Nosocomial meningitis
4. Encephalitis

- Audit standards taken from UK joint specialist societies' guidelines.
- 40 audit standards.

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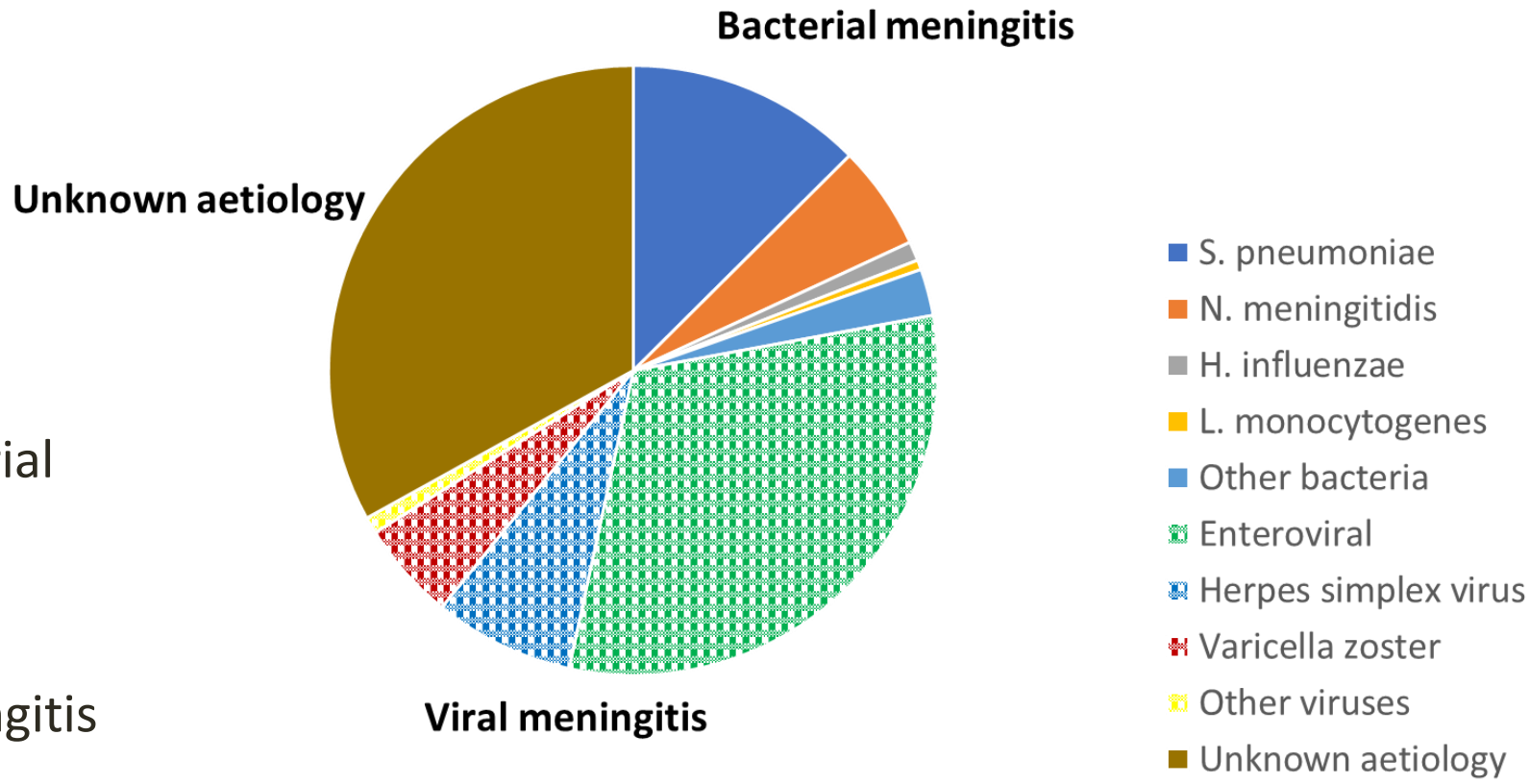
RESULTS:

- 1,472 patients from 64 hospitals throughout the UK and Ireland.
- 57% female
- Median age 34 years.
- 615 (42%) viral meningitis
- 303/1472 (21%) confirmed bacterial meningitis
- Overall mortality was 3%
- 16% - pneumococcal meningitis
- 8% - meningococcal meningitis



ADHERENCE WITH AUDIT STANDARDS:

	Audit Standard
Blood cultures taken < 1 h of arrival at hospital	**50%**
Median time to LP	**16 hrs (IQR 8,27)**
LP performed < 1 h of arrival at hospital	**2%**
Neuroimaging prior to LP without guideline-specified indication	**62%**
Antibiotics commenced within the first hour	**27%**
CSF pneumococcal / meningococcal PCR sent	**28% / 29.5%**
HIV testing	**44%**
Antibiotics: 2 g ceftriaxone IV every 12hr / 2g cefotaxime IV 6-8hrly	**82%**
Age ≥60 receiving 2 g IV ampicillin/amoxicillin 4-hourly	**21%**
10 mg dexamethasone IV 6 hourly given	**26%**

DISCUSSION:

- Clinical care currently being delivered in the UK is not in line with UK joint specialist societies' guidelines.
- Considerable room for improvement:
  - Timing of LPs
  - Timely use of microbiology diagnostics
  - Adjunctive steroids

- **Next steps:**

1. Development of electronic meningitis pathways using EHRS e.g. EPIC
2. Expanded our local electronic guidelines e.g. microguide
3. Development of education tools for infection specialists
4. NICE guidelines

QUESTIONS?

With thanks to:

- **All of the 64 NAMM contributing sites**
- **NAMM investigators**
- **NITCAR network**