P42

WHAT DO BRITISH AND IRISH MFECTION SPECIALISTS THINK ABOUT NON-INPATIENT PARENTERAL ANTIBIOTIC THERAPY? RA Seato", and D Nathwani, Infection and Immunodeficiency unit, Tayside Universities Teaching Hospitals NHS Trust, Kings Cross Hospital, Dundee, UK

Background. Non-inpatient parenteral antibiotic therapy or outpatient and home parenteral antibiotic therapy (OHPAT) therapy for stable, immediately non-life-threatening infection is a standard of care in North America. In the UK and Ireland formal OHPAT programmcs arc not well established. The reasons for these differences in practice arc unclear.

Methods. A postal survey of 348 infection specialists (microbiologists and ID physicians) in the UK and Ireland was carried out in June 1999. Questions aimed to determine their experience with OHPAT and their views as to the barriers which may have prevented such a programme in their Trust. Participants were also asked to list the 3 most appropriate infections which could be managed with OHPAT and finally were given four possible options for funding and clinical responsibility.

Results. There was a response rate of 44% at the time of writing. Only 21% had an established OHPAT programme although 60% had some experience. Of those who did not have a programme 69% thought there was a definite need. Barriers to the development of an OHPAT programme identified were small numbers of appropriate patients and fragmentation of patients throughout the specialities (74%), organisational issues (funding, hospital-community links, lack of leadership (or clinical apathy), identification and training of staff and lack of lime to organise a programme). Concerns over patient safety were expressed by 10% of respondents. Lack of experience in OHPAT or lack of awareness of suitable guidelines were expressed as barriers by 14%.Deep seated (bone and joint and endocarditis), soft tissue, device-related and complex respiratory tract infections were consistently identified as most appropriate for an OHPAT programme but a wide range of other infections were also identified. 40% thought that the hospital should pay and specialists should take day-to-day clinical responsibility Eighteen percent thought care should be shared between specialists and GPs.

Conclusions. Few OHPAT programmes were identified but most respondents perceived a need in their Trust. Many of the barriers identified arc related to organisational issues which can be overcome provided there is a local advocate and good cooperation between hospital and community

P43

DETECTION OF MACROLIDE AND LINCONSAMIDE RESISTANCE PHENOTYPES IN STAPHYLOCOCCI M.Twagira, J.Games, M.Rogers, H.Panigrahi, Deaprtment of Microbiology, North Manchester General Hospital, UK

OBJECTIVE: To detect and interpret different phenotypic expression of resistance to macrolides (M), linconsamides (L) and streptogramins (S); MLS in staphylococci, that may not be detectable by routine susceptibility testing. **METHODS:** 110 staphylococci were re-tested using the Stokes Rotatory Plate method. We augumented/modified the routine procedure by: 1) including a lincomycin disc on a separate plate and measuring the clindamycin Minimum Inhibitory Concentration, MIC (E-TEST) of all isolates, 2) In all erythromycin resistant isolates, we apposed erythromycin disc to a a) clindamycin and/or lincomycin b) quinupristin/dalfopristin discs. **RESULTS:** Both procedures detected 12 isolates with constitutive MLSb resistance phenotype (MLSCbC). The detection of other phenotypes (34 inducible MLSb, 1M and IL) was only possible with the modified/augumented procedure. Most isolates showed no resistance to quinupristin/dalfopristin. Clindamycin MIC was high in MLSbCphenotypes (1.5-256) but low in most others (0.038-1.0). **CONCLUSIONS:** The above modification/ augumentation allow the detection and interpretation of the varied resistance phenotypes present in staphylococci and thus help in choosing the best compound to use in their infections.

P44

RIFAMPICIN RESISTANCE IN *MYCOBACTERIUM KANSASII* IS ASSOCIATED WITH *RPOB* GENE MUTATIONS. J.L. Klein, T.J. Brown and G.L. French, Department of Microbiology, Guy's, King's and St. Thomas' School of Medicine, London, UK.

Aim: To determine whether rifampicin resistance in *M. kansasii* is associated with mutations in the *rpoB* gene.
Methods: A rifampicin-resistant strain of *M. kansasii* was generated *in* vitro through selection on rifampicin-containing media. The DNA sequence of a 69 base pair fragment of the *rpoB* gene was determined in this strain, and five other rifampicin-resistant clinical isolates, and compared with the same fragment from seven rifampicin-sensitive isolates using PCR and direct DNA sequencing methodology. Etests were used to estimate rifampicin minimal inhibitory concentrations (MIC's).
Results: All rifampicin-sensitive isolates had DNA sequences predicting amino acid protein sequences that were identical to each other, and to that of *M. tuberculosis.* In contrast, all rifampicin-resistant isolates had missense point mutations within the 69 base pair region. Etest MIC's of rifampicin for five rifampicin-resistant isolates were >256 mg/l and for three rifampicin-sensitive isolates were <0.50 mg/l.
Conclusion: Missense mutations in the *rpoB* gene appear to be the main cause of rifampicin resistance in *M. kansasii.*

P46

THE ANTICOAGULANT ACTVITY OF MUPIROCIN AND ITS INTERACTION WITH NASAL SECRETIONS AND SERUM ALBUMIN RLR Hill, Dulwich Public Health Laboratory & Medical Microbiology, King's College Hospital and GKT School of Medicine, London SE5 9RS, UK.

Topical antimicrobials may contribute to the prevention of infection in compromised patients but require assessment of their interaction with the host. Mupirocin (2%) is in direct contact with blood when applied to central venous lines (CVL) to reduce colonisation. In whole blood, 4096 mg/l of mupirocin almost doubled clotting times from an average of 4 min 34 sec to 8 min 33 sec ($P<0.05$). Mupirocin was 97% bound by plasma and mass spectrometry showed that, in serum albumen, the intact molecule ofmupirocin was absorbed by the characteristic dominant charge /mass of 68,000 The higher efficacy of mupirocin in treating nasal carriage of *Staphylococcus aureus in* comparison to chlorhexidine was modelled by determining the activity of both substances in human nasal secretions; mupirocin remained 100% active compared to chlorhexidine, which was reduced from 1000 mg/l to an equivalent of 38.5 mg/l. Moderate anticoagulant activity may be useful for preventing CVL-related infection whilst the lack of inactivation by nasal secretions is commensurate with the high intranasal activity of mupirocin against *S. aureus.*