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SURVEILLANCE SURFACE SWABS IN N EONATAL UNIT - SHOULD WF. CHANGE OUR PRACTICE <u>DUPADHYAY</u> H PANIGRAHI, J COURIEL MBONE C.SMITH AND B.OLALEYE DEPT OF MICROBIOLOGY & DEPT OF PAEDIATRICS'N.M.G.H. BACKGROUND: It is common practice in neonatal units to obtain routine surveillance swabs from a variety of body sites to identify potential pathogens, in order to anticipate septic events and guide antimicrobial therapy. AIMS & METHOD& A retrospective analysis of two years surface swab results from neonates admitted to Neonatal Unit of our hospital, was carried out to analyse (a) pattern of bacterial colonisation (b) value of these swabs in predicting sepsis and identifying the cause (c) the cost implication of the practice of surveillance swabs. **RESULTS:** 491 neonates had a total of 1987 swabs taken of which 1320 (66%) were positive bacteriologically. Umbilicus, ear and nose swabs were 38%, 28% and 58% positive respectively. Mixed skin flora was the predominant organism being 64%. 77% and 87% respectively from umbilicus, ear and nose swabs. This was followed by staph aureus and coliforms During the same period 273 blood cultures were taken, of which 3 1 (11%) were positive, majority of these (77%) being coagulase negative staph. Also 20 babies during this period received antibiotics for suspected clinical sepsis. CONCLUSION: Correlation between blood cultures and surface swabs positivity was poor. Neither these results helped to predict clinical infection. Cost of the exercise was considerable making it a wasteful practice. Obstetrics or neonatal diagnosis did not influence the swab result. We recommend the practice of routine surveillance swabbing should be stopped

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MYOSITIS IN MENINGOCOCCAL DISEASE AND TUMOUR NECROSIS FACTOR-a. ED Carrol. APJ Thomson, KJ Mobbs, WD Fraser', CA Hart, Institute of Child Health, RLCH, Alder Hey, * Department of Clinical Chemistry, University of Liverpool, Liverpool.

INTRODUCTION: Myalgia (indicating myositis) is under-reported in meningococcal disease (MCD). Tumour necrosis factor- α (TNF-a) and interleukin-8 (IL-8) may be involved in the pathophysiology of myositis in septic shock, and this study aims to demonstrate TNF-a and IL-8 mediated myositis as measured by elevated creatinine kinase skeletal muscle isoenzyme (CK-MM) concentrations on day 2. METHODS: 68 children were prospectively studied. Severity of disease was defined using the Glasgow Meningococcal Septicaemia Prognostic Score (GMSPS). **RESULTS:** There were 34 females and 34 males. Median age 2.7 years, IQR 1 .0-7.9 years. 38/68 (56%) had elevated CK-MM CK-MM correlated significantly with TNF-a, IL-8 and GMSPS. CONCLUSIONS: CK-MM correlated both with TNF-

a, IL-8 and GMSPS score. **TNF-a** and IL-8 are potential mediators in the pathophysiology of myositis in MCD.

PROSPECTIVE STUDY OF FACTORS INFLUENCING DURATION OF SYMPTOMS IN HOSPITALISED PATIENTS WITH ACUTE INFECTION I.M. Lewis'. ', N W. Read², M.W. McKendrick¹ Dept. of Infection & Tropical Medicine Royal Hallamshire Hospital'and Gastro-Intestinal Motility Unit, Northern General Hospital: Sheffield, UK Sequential patients, aged 18-50, admitted to the Dept. of Infection with an acute infection, but in previous good health were studied. Patients completed validated psychometric questionnaires on admission. Data on clinical observations and haematological markers was also collected. Follow up was carried out at 3 & 6 months. 101 patients were recruited. At 3 months, 8 1 were assessed; 30 (37.5%) had persisting symptoms. Symptomatic Patients (S+) had significantly higher admission case level depression scores on the Hospital Anxiety and Depression Scale than the Non-Symptomatic group (S-) (P < 0.01). There was a significant correlation between symptom duration and difficulties with assertiveness in women ($P \le 0$ 05). The specific infection. haematological data, duration of fever and life events at the time of infection did not discriminate between the $\,S^+\,$ and S- groups. (6 month data will also be presented.) In this prospective study predictive factors for persisting symptoms at 3 months after acute illness included depression at onset for both sexes and lack of assertiveness in women

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SUB-GENOTYPES OF MUPIROCIN-RESISTANT EMRSA- 16 AND THEIR COMPARATIVE RESISTANCE TO PHAGOCYTOSIS. <u>RLR Hill</u>, M Clapperton, N Rolando, JJ Wade. Dulwich Public Health Laboratory & Medical Microbiology, King's College Hospital, Denmark Hill, London SE5 9RS, UK.

High-level mupirocin-resistant MRSA (MuMRSA), particularly of EMRSA type 16, are a severe problem for infection control. Macrorestriction of MuMRSA typed as EMRSA- 16 with Sma I, only identified a common clonal type. Using Sst II, four subtypes (A-D) were identified amongst 106 MuMRSA of the same Sma I type: 72 (51.1%) weresubtype A, 11(7.8%) B, 47 (33.3%) C and 11 (7.8%) subtype D. Subtype B was not isolated from infected lesions in contrast to 22 (30.5%) of A, 13 (27.6%) of C and 3 (27.2%) of D. Phagocytic assays using ³H uridine were carried-out with an isolate of each sub-type plus a control mupirocinsensitive MRSA. Mean percentages ofbacterial cells of each sub-type phagocytosed (\pm SD) were 77.7 \pm 5.66, 82.18 ± 2.09 , 77.29 ± 1.57 and 77.12 ± 4.57 , for types A, B, C and D, respectively. The control was $85.96 \pm$ 5.04. Although there was no significance in levels of phagocytosis between sub-types, B was phagocytosed more than other sub-types and did not cause infection. It is therefore possible that sub-genotypes of MuMRSA of EMRSA- 16, differ in their pathogenicity.