

This was confirmed when he was no longer exposed to the chemical and his symptoms improved.

People susceptible to malignant hyperthermia can lead a normal life provided that they take certain precautions, which include avoiding inappropriate anaesthetic agents and neuroleptic drugs and not taking severe exercise in hot conditions. Avoiding occupational exposure to halogenated hydrocarbons such as bromochlorodifluoromethane should be added to the list as these may cause rhabdomyolysis.

1 Denborough MA. Heat stroke and malignant hyperpyrexia. *Med J Aust* 1982;1:204-5.

2 Denborough MA, Collins SP, Hopkinson KC. Rhabdomyolysis and malignant hyperpyrexia. *Br Med J* 1984;288:1878.

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Are routine superficial cultures worth while in neonatal practice?

Financial prudence and the optimum use of scarce resources are assuming increasing importance in medical management. In this context we assessed the clinical value of superficial bacterial cultures taken either routinely on admission of infants to a paediatric unit or as part of a diagnostic investigation to exclude sepsis.

Patients, methods, and results

We reviewed the results of superficial cultures performed for all neonates (age 4-43 days) admitted from home to an infant unit through the outpatient department over six months. We also reviewed the results of superficial and central cultures performed to investigate suspected sepsis in neonatal inpatients (term babies aged up to 2 weeks and preterm babies until age at discharge) over 12 months.

Of 1050 superficial bacterial cultures performed for 273 infants admitted from home, 150 (14%) of 29 throat swabs, 72 nasal swabs, and 49 rectal swabs, yielded pathogenic organisms. *Staphylococcus aureus* (62 nasal swabs) and *Escherichia coli* (12 throat swabs and 14 rectal swabs) were the most common organisms. There was little correlation between results and site: *S aureus* was isolated from several superficial sites in three cases, and *E coli* from throat and nasal swabs but not from a rectal swab in one. In 15 cases the results on culture of routine rectal swabs led to the infants being isolated. No other routine culture performed without a clinical indication affected management.

In all, 241 microbiological examinations to confirm sepsis were performed for 225 patients over 12 months; 1142 cultures (776 superficial, 241 of blood, and 125 of cerebrospinal fluid) were obtained. Organisms were isolated from 51 of the blood cultures, but low colony counts of *S albus* (14 cultures) and *S aureus* (one) suggested possible contamination.

The same organism was grown from superficial and blood cultures in four cases and from blood cultures and rectal swabs in two: in one case *S aureus* was grown from a nasal swab and blood culture, and in one *Proteus mirabilis* was grown from a throat swab and blood culture. Overall the results of superficial cultures agreed with those of blood cultures in four but not in 19 of the 36 infants with septicaemia.

Swabs of the ear or eye were not taken routinely to investigate sepsis, but *S albus* was grown from ear swabs from two infants with septicaemia caused by this organism and *Listeria monocytogenes* was grown from swabs of eyes and ears from an infant with listeria septicaemia.

Five cases of bacterial meningitis were diagnosed from the 125 cultures of cerebrospinal fluid; the findings in 10 other cases suggested viral meningitis. A blood culture and a rectal swab from an infant with *E coli* meningitis also yielded *E coli*, but in the four other infants with bacterial meningitis the results as culture of the superficial swab did not correlate with those from the cerebrospinal fluid.

Comment

The results of culturing superficial swabs did not correlate well with the infecting organism. Gooch and Britt in a study of 9000 newborn babies found that 2.4% of the colonised group became infected as opposed to 0.3%

of the non-colonised group.¹ Our results obtained from superficial cultures and blood cultures made simultaneously did not confirm the value of superficial cultures. In only three (8%) of the 36 infants with septicaemia did the results of the superficial cultures alter management. If management had been based on the results of superficial cultures inappropriate antibiotics might have been selected. The only possible value of routine superficial swabs taken on admission was in identifying infants who carried pathogenic organisms in their bowel and required isolation.

Superficial cultures may identify the local bacterial flora in infants and help in selecting antibiotics.^{2,3} In practice, treatment is started on the basis of clinical indications at the initial examination and reviewed when the results of cultures of blood or cerebrospinal fluid, or both, become available. The clinical condition of the child largely determines whether antibiotics are used and so limits the usefulness of superficial cultures. Our study further suggests that such cultures are of limited value as a routine procedure when outpatients are admitted.

In an era of financial austerity clinicians should satisfy themselves that the information obtained from routine superficial cultures of bacteria is worth while.

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3 Klein JO, Remington JS, Marcey SM. Current concepts of infections of the fetus and newborn infant. In: Remington JS, Klein JO, eds. *Infectious disease of the fetus and newborn infant*. 2nd ed. Philadelphia: WB Saunders, 1983:1-27.

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Anorexia nervosa in a 70 year old man

We report on a 70 year old man with a 40 year history of anorexia nervosa dating from the time he spent as a prisoner of war under the Japanese.

Case report

A 69 year old man presented with abdominal pain. He had needed a partial gastrectomy six years previously for a gastric ulcer. A perforated stomal ulcer was found at laparotomy and a Polya gastrectomy done. Postoperatively he refused to eat or drink and had difficulty with mobilisation. He weighed 31 kg. Neurological examination showed generalised wasting and weakness of his muscles, especially proximally. Reflexes and sensation were normal. Muscle biopsy showed considerable atrophy of type two muscle fibres as seen with disuse and in cachexia. An electromyogram showed a pattern of chronic denervation, and electrodiagnostic studies showed severe sensorimotor neuropathy. Routine biochemical and haematological measurements including creatine kinase were normal.

A year later he was referred again because of his low weight and immobility. He weighed 31 kg and could not sit up in bed or stand unaided. He admitted that his weight had been low and that he had restricted his food intake for years. During the second world war he had been a prisoner of war under the Japanese and had worked on the construction of the Burma to Thailand railway. He avoided talking about his experiences and gave the impression that his captivity had had a profound effect on him. After the war he had worked as a storeman and packer until his retirement at the age of 49. Since his captivity he had been a poor eater. There was no history of vomiting or bulimia. He had married in 1946 but did not have any children. He and his wife were reluctant to talk about their sexual relationship. There was no family history of anorexia nervosa, depression, or any other psychiatric illness.

His serum zinc, iron, phosphate, protein, and albumin concentrations were low. Alkaline phosphatase and γ -glutamyltransferase activities were raised. Other biochemical and haematological variables were normal. Barium studies confirmed an almost total gastrectomy, but no other abnormality was seen. Nasogastric feeding was started. Fifteen days later he weighed 35.2 kg. The next day he complained of abdominal discomfort and distension. Low pressure suction was started, but he died suddenly that night. Permission for a postmortem examination was refused.

Comment

Anorexia nervosa is an underdiagnosed disorder, especially in men. In this case considerable circumstantial evidence favoured a diagnosis of anorexia