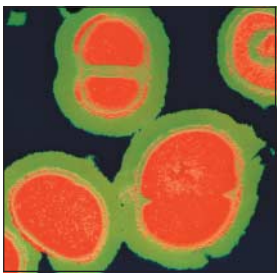
Letters

Improving surveillance of MRSA bacteraemia

Data from north west England support Oxfordshire findings

Editor—Wyllie et al conclude that admission cultures accounted for 24% of total hospital methicillin resistant *Staphylococcus aureus* (MRSA) bacteraemia episodes over seven years to March 2004.[1] Data collected from five district general hospitals and one university hospital in Cheshire and Merseyside and one district general hospital in greater Manchester support this view.

This group of hospitals has collected enhanced MRSA bacteraemia surveillance data using published case definitions from the Department of Health since April 2004. Anonymised data are collected on paper forms and analysed using the FORMIC data capture system.


DR KARI LOUNATMAA/SPL

In all, 534 cases of *S aureus* bacteraemia were identified between April 2004 and March 2005, 334 being methicillin sensitive *S aureus* bacteraemia and 200 MRSA bacteraemia. Sixty six of the MRSA bacteraemia cases occurred within 48 hours of arrival in hospital, 16 being related to a previous hospital admission, 25 in patients known to have been colonised with MRSA, and 13 in patients admitted from nursing or residential homes. Thirty five cases were admitted as medical specialties, 25 of them in patients over 65.

Our results support the suggestion by Wyllie et al that anti-MRSA treatment should be considered for patients with possible staphylococcal sepsis who have previously been admitted or known to be colonised with MRSA. In a predominantly district general hospital setting, anti-MRSA treatment should also be considered for possible staphylococcal sepsis in elderly medical admissions and admissions from nursing homes.

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Competing interests: None declared.

1 Wyllie DH, Peto TEA, Crook D. MRSA bacteraemia in patients on arrival in hospital: a cohort study in Oxfordshire 1997-2003. *BMJ* 2005;331:992-5. (29 October.)

Scottish data prompt query of significance of MRSA isolated from blood in acute admissions

Editor—Wyllie et al recommend that patients presenting with methicillin resistant *Staphylococcus aureus* (MRSA) bacteraemia on admission, accounting for 24% of all MRSA bacteraemias, require immediate consideration for vancomycin treatment.[1]

We investigated all positive blood cultures taken in acute admissions at this hospital over three years. We used microbiology laboratory results, case notes, notes taken by the infection control nurses, and reports to Health Protection Scotland of bloodborne infections to determine whether these infections were genuine.

The total number of *S aureus* bacteraemias was 244, with 65 in acute admissions. The number of MRSA bacteraemias was 112, with 24 in acute admissions, which accounted for 18.8% of all hospital MRSA bacteraemias. Seventeen patients (81%) had been admitted from a nursing home or other hospital or had recently had an inpatient hospital stay (less than 6 months previously). The contamination rate from all blood cultures for accident and emergency was 49% over the three years.

A significant proportion (50%) of MRSA from blood cultures, in patients newly admitted to hospital, were not suggestive of generalised infection. The source of the MRSA could be skin colonisation of the patient contaminating the blood cultures, or even the medical or nursing staff taking the blood cultures in the hectic environment of acute admissions. The 49% contamination rate for all blood cultures in accident and emergency further supports these results.

These data highlight that blood culture results should be interpreted in context with the patient's general condition, subsequent progress, and MRSA status determined by screening.

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1 Wyllie DH, Peto TEA, Crook D. MRSA bacteraemia in patients on arrival in hospital: a cohort study in Oxfordshire 1997-2003. *BMJ* 2005;331:992-5. (29 October.)

The tragedy of targets

Editor—Targets look good: they tend to be met. People put extra resources into targeted areas (that are therefore not available for non-targeted areas). Also, targeted areas are often newer and more high tech, so learning curves ensure improvement no matter what. When these mechanisms fail, various subtle gaming methods can be used.[1] None of these mechanisms has anything to do with improving hospital safety and quality. Targets are immediate but fixing systems is difficult and long term.

Spiegelhalter shows what happens when hospital acquired infections are made targets.[2] He also mentions but does not include difficulties with numerators and denominators in his calculations. With MRSA colonisation, the harder you look the more you find. Occupied bed days are frequently used denominators—at best a crude approximation to the true unmeasurable denominator of susceptible patients.

Hospital systems first need to work in a stable, reproducible, and predictable way and then sequential analysis of surveillance data is required to ensure maintenance and further progress. There must be vigorous feedback for learning how to continue to do better. Within hospital data vary very much less than between hospital data, and many of the difficulties identified by Spiegelhalter vanish when we stick to using our own data sequentially. The mania for comparing hospitals has to be replaced with relentless implementation of systems based on best practice and sequential within institution monitoring.

Duckworth and Charlett point out that knowledge about best practice is seriously deficient in some areas.[3] Setting targets when little is known about mechanisms is doubly absurd. Clearly, extra effort is needed to try to fill the gaps. A potentially valuable

tool is stochastic modelling as it seems to be capable of identifying the system factors that have the greatest influence. Central offices could do more to promote such research.

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Competing interests: None declared.

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Detecting fabricated or induced illness in children

Are we ready for covert video surveillance?

Editor—Foreman identifies covert video surveillance (CVS) as a potential tool for detecting fabricated or induced illness in children, despite several constraints to its effective use.[1] Of various methods of inducing illness, suffocation may seem the only one that could be averted using it.

The Regulation of Investigatory Powers Act 2000 does not clearly help the cause of CVS. Courts are also not in favour of its use. Indeed, healthcare providers might even contribute to Munchausen syndrome by proxy.[2]

Little information exists about episodes of inducing illness in children by carers while in a hospital. Only one study, in Atlanta, Georgia, of 41 children with suspicion of Munchausen's syndrome by proxy, showed that CVS helped confirm diagnosis in 13 out of 23 cases. Of these 13 cases, only two of induction were picked up by such surveillance: the rest were fabricated. The authors highlight the ethical and privacy related issues of using CVS, indicating the need for specific training and raising concerns about the timing of intervention after detection of any abnormality.[3]

The large cost-benefit implications of CVS have to be considered. Instead, resources could be directed towards primary prevention with a multidisciplinary approach of public health, education departments, and social services.

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Covert video surveillance can protect children and parents if rules are clear

Editor—Fabricated or induced illness is one of the most difficult problems to diagnose in paediatrics.[1] Most patients have had many medical procedures before anyone suspects the diagnosis. Even after the diagnosis is confirmed, many in health care who have worked with the family may question the diagnosis.

Covert video surveillance may be the only way to provide the evidence that is needed. Rules are required to protect all involved.

- A court order is essential. It will require medical testimony, but obviously will not be made known to the parents or suspected perpetrator. The level of proof needed should be equal to that for a search warrant
- Parents should be told about and shown a visible camera as it is common for them to be informed of the surveillance by sympathetic staff members. However, they and staff should not be shown or told about the second or third hidden camera
- Provision for the safety of the infant must be carefully delineated
- The quality of the recording should be excellent to allow close-ups if needed
- A reasonable time limit should be placed on the surveillance.

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1 Foreman DM. Detecting fabricated or induced illness in children. *BMJ* 2005;331:978-9. (29 October.)

Orphan drugs and the NHS

Consider whom drug regulation is designed to protect

Editor—Orphan drugs pose several dilemmas for policymakers, not all of which are addressed by discussing cost effectiveness.[1]

To be reimbursed by a publicly funded healthcare system a drug needs to be effective, safe in animal testing, effective in humans, and a cost effective use of public resources.

Orphan drugs will not generate sufficient sales to recoup the cost of jumping these hurdles. One solution is to offer special incentives to companies to develop orphan drugs—for example, a higher cost per quality of life years (QALY) threshold. This is inflationary, since it effectively increases the price that the NHS is willing to pay for certain types of drugs.


PENNY TWEEDIE/SPL

Another solution might be to reduce the costs of development. The hurdles that drugs must cross are designed to protect the public from potentially harmful drugs. Not every person with an illness can give his or her consent to a new or experimental treatment, so clinical trials are conducted in a minority who are prepared to do so.

With a very rare illness it may be possible to obtain consent from every person (or most people) with the illness. If most people with a rare illness are prepared to consent to accepting a drug that has crossed lower regulatory thresholds, the ethical position seems stronger. Indeed, would we have the right to deny such patients a drug?

The onus is placed on the pharmaceutical manufacturer to identify the community to which it is responsible (those with the disease) and secure informed consent. The appropriate threshold for consent should be that the majority of those believed to suffer from the disease (or their guardians) have given consent. Without the consent of the majority the pharmaceutical manufacturer must comply with the usual regulations. With consent the industry can proceed—in effect being regulated by the patients themselves.

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1 McCabe C, Claxton K, Tsuchiya A. Orphan drugs and the NHS: should we value rarity? *BMJ* 2005;331:1016-9. (29 October.)

Fairness in health care entails more than cost effectiveness

Editor—When it comes to disease and illness, of course we should not value rarity.[1] It certainly does not matter to those with rare disorders that they have a rare disease. What matters is how much the treatments cost.

The real question is how much we should value cost and cost effectiveness. Cost clearly matters to some degree, and we should be aware of whether NHS resources are being used effectively, but is cost effectiveness everything?

McCabe et al consider two groups of people with similar diseases (J and K).[1] Disease J is rare and treatment expensive, disease K is common and treatment cheaper. They say that to argue for funding treatment for those with J is to value the health gain of the few over that of the many. But why is health gain the important factor for a fair outcome? Is it fair that people are judged only in terms of how cost effective their health gain is?

What matters might be that the people themselves are treated equally (rather than their potential for health gain). Perhaps it matters that people's healthcare needs are met, that they have equal access to care, or that they are given the same chance to lead normal lives.

It helps when the example is constructed so that there are no differences between the two conditions and only two are being considered. If two such diseases with identical patients existed the authors might be correct. But funding decisions are more often made in the context of a range of services with broader considerations.

Those who think that the question of funding for expensive treatments (as opposed to rare ones) is difficult are not convinced that justice in health care is simply to be understood in terms of health gains.

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1 McCabe C, Claxton K, Tsuchiya A. Orphan drugs and the NHS: should we value rarity? *BMJ* 2005;331:1016-9. (29 October.)

Asymptomatic spread of flu is not proved

Editor—Macfarlane and Lim state that infection control of pandemic flu would be challenging because "unlike SARS, flu is highly infectious before patients develop definite symptoms."[1]

What is the evidence for asymptomatic transmission of flu? Fraser et al describe a model for the spread of flu, but it is only a mathematical model for transmission and the paper does not provide any convincing references to support asymptomatic spread.[2] Older work by R B Couch in the 1970s states that viral shedding may sometimes occur before clinically significant symptoms, but viral shedding detected by nasal swabs cannot be equated to transmission of infection. Infected airway mucus must be exchanged for flu to transmit from one person to another.

Rhinorrhoea, coughing, and sneezing are important factors in facilitating aerosol and fomites transmission of infection, and I doubt that any clinically significant exchange of airway mucus can occur from asymptomatic cases of flu.

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Competing interests: None declared.

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Total smoking ban is accepted in New Zealand

Editor—Having only a partial ban on smoking in public places is seriously inadequate in terms of protecting the public health from secondhand smoke.[1] New Zealand introduced a complete ban on smoking in restaurants and bars in December 2004. This ban has been well accepted by the public, with a clear majority showing support five months after its introduction (69% in April 2005).[2]

Compliance with the law seems to be high, 97%,[3] and legal action by health authorities against publicans defying the law has been rare. Trends in national tobacco sales data since the law are not yet available, but the legislation was associated with a significant increase in the number of calls to the national Quitline.[4] A significant increase in the dispensing of subsidised nicotine replacement treatment vouchers has also occurred.

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Competing interests: NW has undertaken contract work for the Quitline Service and for various other health sector agencies involved in tobacco control.

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Misdiagnosis of conversion symptoms

We may have gone full circle

Editor—I am puzzled that a systematic review of cases misdiagnosed as hysteria or conversion disorder fails to refer, even briefly, to the complex history of this neurosis.[1]

In their discussion the authors write: "In the study of misdiagnosis of conversion symptoms or hysteria the overall pooled proportion for the whole period was 8.4% (7.1% to 9.9%). This overall figure, however, disguises a change over time from 29% in the 1950s and 17% in the 1960s to a consistently low rate of 4% for every decade since then."

The drop from 29% in the '50s to 4% over the past three decades seems dramatic. However, it more or less coincides with the precipitous fall from grace in psychiatry of psychoanalytic schools of thought and the emerging dominance of biological psychiatry that occurred in the mid-60s. Thus, the high rates of misdiagnosis that are alleged to have occurred in the '50s are not so remarkable if one considers that this diagnosis was much more frequently invoked then than it is today.

Indeed, I suggest that we have gone full circle and that many conditions now being diagnosed as organic are in fact functional. I look forward to reading the review article on this phenomenon in an October edition of the *BMJ* in 2045.

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Competing interests: None declared.

1 Stone J, Smyth R, Carson A, Lewis S, Prescott R, Warlow C, et al. Systematic review of misdiagnosis of conversion symptoms and "hysteria." *BMJ* 2005;331:989-91. (29 October.)

Conversion disorders still exist

Editor—The concept that unresolved tension from psychological conflict is either transferred to the parasympathetic system causing psychosomatic diseases or to the muscular system leading to conversion reactions still holds water. Laypeople's psychiatric vocabulary has improved: patients can better articulate their distress, and this has probably resulted in the decline of conversion disorders.[1] Many potential conversion disorders now present as straightforward cases of depression.

True cases of conversion disorder still exist. As a whole, conversion disorders are characterised by sensory, motor, or visceral symptoms; commonly missed symptoms are gait and movement disorders. Hoover's contralateral leg sign is currently less talked about in academic circles, but it is still useful in differentiating hysterical hemiplegia from true hemiplegia. This is demonstrated by placing the palm underneath the ankle of the affected leg and asking the patient to raise the unaffected leg; the examiner can feel the pressure in his or her palm in true hemiplegia.

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1 Stone J, Smyth R, Carson A, Lewis S, Prescott R, Warlow C, et al. Systematic review of misdiagnosis of conversion symptoms and "hysteria." *BMJ* 2005;331:989-91. (29 October.)

Obesity, like atherosclerosis, starts early in life

Editor—The importance of starting to prevent obesity in infancy, as reported by Baird et al,[1] has a counterpart in atherosclerosis.

My mentor, Dr Paul D White, preached that prevention of coronary atherosclerosis should start the moment a person is born.[2] Necropsy studies of war casualties in Korea and Vietnam showed that subclinical atherosclerosis is evident in late adolescence.[3 4] Therefore, long range prevention of atherosclerosis and its sequelae, just like obesity, should begin in early childhood.

A saying in China, where the prevalence of obesity continues the upward trend seen in the rest of the world,[5] is that fat children grow up to be fat adults—seemingly a universal phenomenon.

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Competing interests: None declared.

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