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Are you taking the lead?

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Doctors should be leaders and leadership in the area of appropriate antibiotic usage and control of infection is of central importance to patients and to all our practices.

You do not have to work in a hospital to know the importance of infections such as *Clostridium difficile* or methicillin-resistant *Staphylococcus aureus* (MRSA). Simply open the newspapers and scare stories abound. A recent survey revealed that one of the greatest concerns of patients going into hospital was that they might catch an infection. Our responsibility as clinicians is to reduce the incidence of infection as much as possible and ensure best practice is in place. Then we must communicate to the public exactly what is going on and what can realistically be expected. Infections cannot be eliminated from clinical practice but do the public appreciate this? Bacteria such as MRSA circulate and can cause clinically significant infections in the community but this too often is not appreciated.[1] So how do we go about being leaders, improving outcome and instilling confidence in patients?

There are many helpful, although often long and complex, guidelines that have been produced to aid management of healthcare-associated infection (HCAI) which can be extremely useful to the specialist but not make it on to the reading list of the busy general physician. Therefore, the HCAI Working Group of the Royal College of Physicians (RCP) has drawn up a one-page guideline to help general physicians identify what is most important for them in their routine clinical practice.[2] The principles outlined are simple and should be easy to implement in most places.

Antibiotic policies should be based on local infection data as well as national and international information in regards to bug resistance patterns in order to select single drug treatments, where possible, for specific infections. Short course chemotherapy and the avoidance of multiple and unnecessary broad spectrum antibiotics are key to preventing the emergence of drug-resistant bacteria. The potential for development of such organisms is great. Increasing emergence of extended spectrum beta-lactamase resistant *Escherichia coli* is just one example of what is likely to be an increasingly worrying trend.[3,4] Some agents are more likely than others to lead to collateral damage such as secondary *C. difficile* infection which is itself becoming more pathogenic, so minimising use of cephalosporins and quinolones makes sense.[5] Involving pharmaceutical colleagues to ensure that antibiotic prescriptions have stop orders and that prophylaxis is usually single dose is also advised.

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Acute physicians need to routinely involve infection specialists in the management of patients with serious or complicated infection. Appropriate intravenous (iv) to oral switching and/or the use of an iv outpatient service may help to improve outcomes and reduce length of stay to the benefit of the patient and lead to savings for the hospital. A programme of rolling audit is essential to determine effective interventions.

Managing infection is a core activity and doctors provide knowledge and implementation skills. My experience is that surgical, managerial and other colleagues develop an unexpected interest in infection when they see financial benefits and the unblocking of beds for routine admissions. For any successful initiative to control infection, there are two important pre-requisites. The first is a defined training programme that reaches out to all levels of local healthcare environment from general practice through hospital pharmacists to hospital wards and includes not only doctors but nurses, pharmacists and managers. The second requirement is an excellent and organised communication strategy.

Doctors make excellent Directors of Infection Prevention and Control. This post must exist in all trusts and it should be a high profile position which helps spread the message about the importance of tackling infection. I would suggest that leadership is the key requirement whereas expertise in infection (which is unevenly available in the UK) can be supplied by a variety of colleagues. Consultants in both infection and other disciplines should take up the challenge and seek a place on the hospital board where they can contribute more widely. A good leader here can reduce the number of meetings and make ones already in place more effective. All individuals and specialty teams should take responsibility for infection rates and antibiotic usage, by using clinical incident reporting to help reduce infections and bring discussion of infection into the appraisal and performance monitoring systems.

So what is the purpose of the RCP HCAI Working Group? The broad aims are to:

1 Help to encourage physicians to take a lead in antibiotic prescribing and have a central role in infection management.
2 Promote best practice and knowledge about infection management to all doctors.
3 Ensure that understanding of infection and antibiotic prescribing issues is part of training, continuing professional development and appraisal activities organised by the RCP.
4 Identify and support appropriate basic and translational research.

Please do read and act on the one-page guideline.[2] If all physicians do this, it will be clear who is leading the way on the

infection agenda. Rolling up shirt sleeves is a first step which shows patients (and other staff) that you are taking their concerns seriously but there is more to leadership than just that.

References

1 Nathwani D, Morgan M, Masterton RG *et al.* Guidelines for UK practice for the diagnosis and management of methicillin-resistant *Staphylococcus aureus* (MRSA) infections presenting in the community. *J Antimicrob Chemother* 2008;61:976–94.

2 Top 10 tips for effective antibiotic prescribing. www.rcplondon.ac.uk/About-the-college/committees/Healthcare-Associated-Infections/Pages/Resources.aspx.

3 Melzer M, Petersen I. Mortality following bacteraemic infection caused by extended spectrum beta-lactamase (ESBL) producing *E. coli* compared to non-ESBL producing *E. coli. J Infect* 2007;55:254–9.

4 Woodford N, Reddy S, Fagan EJ *et al.* Wide geographic spread of diverse acquired AmpC beta-lactamases among *Escherichia coli* and *Klebsiella spp.* in the UK and Ireland. *J Antimicrob Chemother* 2007;59:102–5.

5 Kelly CP, LaMont JT. *Clostridium difficile* – more difficult than ever. *N Engl J Med* 2008;359:1932–40.

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