## Physician assistants: a personal perspective

Editor – I would like to applaud White *et al* on their departmental evaluation of the introduction of physician assistants (*Clin Med* February 2013 pp15–18). I would like to offer a personal perspective of working with a physician assistant for a year during my first year of cardiology specialty training.

I had the opportunity to work alongside a physician assistant (PA) in my first year as a cardiology registrar. The PA had held the post for just under a year when I joined the department. Their role was to work on the cardiology step-down ward and perform clinical duties such as ward rounds, patient assessment and basic clinical procedures. The PA worked at the level of a senior house officer.

Our unit had an eight-bed coronary care unit, a twelve-bed step-down ward and a variable number of outliers on other wards. The junior medical team consisted of two foundation year one doctors and two or three senior house officers (foundation year two and core medical trainees). This might sound over-staffed, but with a combination of general medical on calls, fixed leave and study leave, the unit generally ran with two junior team members. Due to the European Working Time Directive (EWTD) this meant that team members would change daily. This obviously would affect continuity of care for patients.

The PA offered the only thread of continuity for the ward. Their role was central to the effective delivery of good patient care for our inpatients. I hold the personal view that the PA was the most effective member of the team and I could depend on their clinical assessments and management plans. Moreover, our PA was always keen to learn, would work late, join the registrars with referrals and come to meetings.

In modern medicine continuity of care is often the loser to EWTD. We need high quality PAs to join the multiple professional healthcare team to deliver patient-centred care.

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## Churg-Strauss syndrome: remember cardiac complications too

Editor – Llewellyn *et al* describe an important case and overview of Churg-Strauss syndrome (CSS) (*Clin Med* February 2013 pp103–5). In terms of its multisystem involvement, it is important to also consider cardiac involvement, which was not specifically discussed in the paper. Although the patient had a normal echocardiogram and did not display obvious cardiac involvement, it is important to remember this possibility when treating such cases. Cardiomyopathy is the main independent predictor of death in CSS, with a hazard ratio of 4.11 for death after multivariate analysis.[1] In a large recent retrospective series, cardiomyopathy occurred in over 16% of CSS patients, and interestingly anti-neutrophil cytoplasmic antibody (ANCA) negative patients had more cardiac involvement.[1] The median time to death was 14 months from fatal cardiac events after diagnosis with CSS. Vasculitic lesions can occur in the myocardium and coronary vessels with coronary occlusion and subsequent scarring and fibrosis. Cardiac involvement can therefore present as myocarditis, heart failure, valvular disease (especially mitral regurgitation) and pericardial effusion. This can also be compounded by pulmonary hypertension secondary to lung disease.

An observational study of 32 ambulatory CSS patients detected cardiac involvement in 62%.[2] In those with abnormal cardiac magnetic resonance imaging (MRI), echocardiography could detect cardiac involvement with 83% sensitivity and 80% specificity. In those with echocardiographic abnormalities, cardiac MRI detected cardiac involvement with 88% sensitivity, but only 72% specificity. Notably, 38% of CSS patients had cardiac involvement (on echocardiography or cardiac MRI) despite the absence of cardiac symptoms and a normal ECG (after controlling for diabetes, hypertension and coronary artery disease). Therefore, echocardiography should be used in all CSS patients (cardiac MRI is an alternative but is not always available or practical in a critical care setting).

In summary, it is important for physicians to look beyond symptoms and an ECG for cardiac involvement in CSS with either echocardiography or cardiac MRI as this has prognostic implications.

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## Investigating the frail elderly patient with lower bowel symptoms: what do we do now and can we improve?

Editor – Frailty is increasingly recognized as an important geriatric syndrome related to, but not synonymous with, ageing. It differs from ageing in that it is amenable to both prevention and treatment.[1] Given the improved scientific characterisation of frailty,[2] it is a pity that the authors of the paper on investigation of the 'frail elderly' with lower bowel symptoms (*Clin Med* February 2013 pp 37–41) did not use one of the recognised clinical tools for assessing frailty.

While the judgment of a range of referring physicians, or the treating gastroenterologist, as to fitness for colonoscopy may be a proxy measure for frailty, it may equally be an indicator of ageism given the relative safety of colonoscopy in older people[3] and existing evidence of ageism in a range of cancer services worldwide, including bowel investigations.[4] A formal assessment of frailty would assist in clarifying this issue.

In addition, the continued use of the term 'elderly' may not be helpful as it is rarely associated with fit older people, is

widely considered to imply frailty, and European advocacy organisations have pressed for rejection of its use as a descriptor for older people.[5] It would be helpful if *Clinical Medicine* would consider avoiding the term and instead use 'older person' or 'older people', which are less value-laden and of greater scientific utility.

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## Outpatient parenteral antimicrobial therapy in a changing NHS: challenges and opportunities.

Editor – Dr Chapman made the case for more outpatient parenteral antimicrobial therapy (OPAT) (*Clin Med* February 2013 pp 35–6). The figures in an earlier paper of hers on the clinical efficacy and cost effectiveness of OPAT state that 59% of the treatment episodes were for soft tissue sepsis.[1] The majority of these patients had cellulitis and were receiving ceftriaxone intravenously (IV) with a mean duration of IV antibiotics exceeding 7 days. There are studies comparing inpatient IV therapy with outpatient IV therapy for cellulitis which demonstrate mutual efficacy,[2] but Dr Chapman does not supply the data to support the benefit of IV therapy over oral antibiotic therapy. A large study comparing an oral treatment to IV therapy for cellulitis showed marginally improved outcome with oral therapy.[3] Why, then, do we need to give patients with cellulitis long courses of broad spectrum IV antibiotics, when we have a range of effective oral antibiotics? It may be that many of these patients, because of very slowly resolving skin damage, are mistakenly regarded as having failed initial oral antibiotic therapy, when in fact the duration of recovery is independent of the route of the antibiotic.

Perhaps, before we encourage the Department of Health and our new commissioners to invest in OPAT services, we ought to produce some evidence that IV therapy is better than oral treatment for those conditions in which we are proposing OPAT?

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## References

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### *In response*

Editor – Dr Brindle makes the important point that oral antibiotics should always be used in preference to intravenous (IV) antibiotics where possible. However, the evidence base demonstrating the relative effectiveness of oral and IV antibacterials for significant soft tissue sepsis is limited.[1] The paper he cites by Bernard *et al*[2] used oral pristinamycin in comparison with intravenous penicillin in only a small subset of patients with soft tissue sepsis; that is, patients with erysipelas of moderate severity. The study demonstrated that in these patients pristinamycin was non-inferior to IV penicillin. Although drop-out rates were similar in the two groups, pristinamycin was associated with a significant increase in gastrointestinal upset.

Currently it is accepted that a proportion of patients with soft tissue sepsis will require IV antibiotics, but not admission. The CREST guidelines[3] classify cellulitis by severity into four classes ranging from mild infection (class I) to severe life-threatening infection or sepsis syndrome (class IV). Class II patients have cellulitis with systemic symptoms of sepsis, or with comorbidities that may complicate or delay resolution of infection – for example, lymphoedema, peripheral vascular disease or chronic venous insufficiency. Intravenous antibiotics, through OPAT where available, are recommended for this group, which includes approximately 30% of patients presenting to hospital with cellulitis.[4]

However, there is a real danger of overuse of IV therapy in patients with mild infection[4] and this may be more likely where an OPAT service exists. In our earlier paper this issue was discussed,[5] but it was noted that virtually all patients were referred to OPAT by a physician (either GP or medical admissions unit doctor) and were then further assessed by a specialist OPAT doctor and nurse before being accepted in order to ensure as far as possible that IV therapy was appropriate. Our more recent (unpublished) data show that 8% of patients with cellulitis referred for OPAT are not accepted but are given optimised oral antibiotic therapy; virtually all have already received oral therapy from other healthcare providers, reinforcing the importance of ensuring oral therapy is adequate before considering parenteral antibiotics.

In managing soft tissue sepsis, as with many other infections, choice of IV vs oral antibiotic therapy is often determined to a large extent by clinical judgement, and it is important therefore that their use in OPAT and more generally is overseen through a robust antibiotic stewardship programme.[6] There remain many uncertainties and therefore a need for further prospective comparative studies.

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