

example, Virchow in Silesia<sup>2</sup> and Sir John Simon in England<sup>3</sup> have done in the past.

WALTER W HOLLAND

*Visiting professor,*

*London School of Economics and Political Science,*

*London, UK*

## References

- 1 Timmins N. *The Five Giants: A Biography of the Welfare State*. London: Harper Collins, 1995.
- 2 Reilly RG, McKee M. 'Decipio': examining Virchow in the context of modern 'democracy'. *Public Health* 2012;126:303–307.
- 3 Royston Lambert. *Sir John Simon 1816–1904*. London: McGibbon and Kee, 1963.

## Simultaneous myocardial infarction and ischaemic stroke secondary to paradoxical emboli through a patent foramen ovale

Editor – Grogono *et al* report on an interesting patient but I do not think that they have proven the case for the association that they postulate (*Clin Med* August 2012 pp 391–2).<sup>1</sup> There does not seem to be any doubt that the patient had both a myocardial infarction and a patent foramen ovale (PFO) but:

- The presentation of the assumed stroke is atypical and there is no reported neurological abnormality after the event.
- Lacunar infarction is an unlikely cause of seizure.
- The images from the CT brain scan in this patient are not included in the paper, but in the absence of MRI with diffusion-weighted imaging<sup>2</sup> I do not think that acute ischaemic stroke can be diagnosed with confidence in this case. Given that, comment about an embolic aetiology seems a matter of conjecture.
- No distant source of thrombus was identified.
- PFO may be found in a significant proportion of the adult population.

Is it not more likely that the patient had a transient arrhythmia and/or hypotension leading to seizure?

Regarding the subsequent approach to treatment of the PFO, the authors will be aware of the results of the CLOSURE I trial<sup>3</sup> and a subsequent systematic review of the available literature.<sup>4</sup>

The CLOSURE I trial did not demonstrate any statistical benefit from PFO closure with a STARFlex device compared with medical treatment in patients aged 60 and under with transient ischaemic attack (TIA) or stroke. The trial did show that PFO closure with this device was associated with an increased incidence of atrial fibrillation, thereby replacing a debatable stroke risk factor with one for which there is no doubt.

CHRIS DURKIN

*Consultant physician in geriatric and general medicine with special interest in stroke*

*Stoke Mandeville Hospital, Aylesbury, UK*

## References

- 1 Grogono J, Fitzsimmons SJ, Shah BN *et al*. Simultaneous myocardial infarction and ischaemic stroke secondary to paradoxical emboli through a patent foramen ovale. *Clin Med* 2012;12:391–2.
- 2 Durkin C, Briley D, Meagher T. Diagnosis and management of transient ischaemic attack and ischaemic stroke in the acute phase. *BMJ* 2011;342:d1938.
- 3 Furlan AJ, Reisman M, Massaro J *et al*. Closure or medical therapy for cryptogenic stroke with patent foramen ovale. *N Engl J Med* 2012;366:991–9.
- 4 Kitsios GD, Dahabreh IJ, Abu Dabrh AM *et al*. Patent foramen ovale closure and medical treatments for secondary stroke prevention. A systematic review of observational and randomized evidence. *Stroke* 2012;43:422–431.

## Response

Editor – We thank Dr Durkin for his interest in our recently published 'Lesson of the month'. We agree that the diagnosis of paradoxical embolism cannot be made with certainty; however we wished to use this case to remind physicians to consider this as a possibility, especially in younger stroke patients. Dr Durkin correctly highlights the unusual association of lacunar

cerebral infarction and seizure, and raises the possibility of transient arrhythmia and/or hypotension leading to seizure-like activity (presumably secondary to the myocardial infarction). However, we believe it is equally unlikely that a fit, active and healthy 39-year-old with no cardiovascular risk factors would suffer a large anterior myocardial infarction (MI). Additionally, the presence of an occluded left anterior descending (LAD) coronary artery and fresh thrombus in its diagonal branch – as well as neurological symptoms with confirmed cerebral infarction on CT brain scan – are all in keeping with embolic phenomena. We agree that diffusion-weighted MRI brain imaging is superior to CT scanning and acknowledge this would have been a valuable additional test.

This case occurred prior to the publication of the CLOSURE I trial<sup>1</sup> but, as always, the risks and benefits of PFO device closure and anticoagulation were discussed with the patient. The patient is a high level competitor in martial arts, and is therefore not ideally suited to long-term anti-coagulation. The patient therefore opted for percutaneous PFO closure. The clinical value of percutaneous PFO closure has been a controversial field for many years and the release of the only randomised control trial, CLOSURE I, has failed to resolve many of the outstanding issues. However, the CLOSURE I trial has not been without its own criticism, including the long time to recruitment, the inadequate power to identify small differences between device closure and medical therapy, the high non-closure rates (15%) and the exclusion of 'high risk' patients or patients thought to represent the population seen in daily practice.<sup>2–4</sup> The study does, however, remind us that vascular complications and atrial fibrillation should always be discussed with patients being considered for PFO closure.

The recently published RESPECT and PC Trials did not provide good direction on whether prevention of further stroke by PFO closure is effective, but the totality of results supports the use of PFO closure in a select group of patients at risk of secondary stroke following cryptogenic stroke.<sup>5,6</sup>

JOANNA GROGONO  
Specialist registrar in cardiology, Milton  
Keynes Hospital NHS Foundation Trust

SAMANTHA J FITZSIMMONS  
Specialist registrar in adult congenital  
heart disease, Southampton University  
Hospital

BENOY N SHAH  
Clinical research fellow, Royal Brompton  
Hospital

DHRUBO J RAKHIT  
Consultant cardiologist, Southampton  
University Hospital

HUON H GRAY  
Consultant cardiologist, Southampton  
University Hospital

## References

- 1 Furlan AJ, Reisman M, Massaro J *et al*. Closure or medical therapy for cryptogenic stroke with patent foramen ovale. *N Engl J Med* 2012;366:991–9.
- 2 Johnston SC. Patent foramen ovale closure—closing the door except for trials. *N Engl J Med* 2012;366:1048–50.
- 3 Wilmshurst P. CLOSURE 1 seen through the MIST. *BMJ* 2012;344:e2226. doi: 10.1136/bmj.e2226
- 4 Guijarro C. Device closure for stroke with patent foramen ovale. *N Engl J Med* 2012;366:2322.
- 5 Carroll JD. RESPECT. Late-breaking trial preview presented at the Transcatheter Cardiovascular Therapeutics conference, October 25, 2012, Miami, FL.
- 6 Meier B. PC trial update. Late-breaking trial preview presented at the Transcatheter Cardiovascular Therapeutics conference, October 25, 2012, Miami, FL.

## Inpatient care: should the general physician now take charge?

Editor – Kirthi *et al* have described the difficulties for a specialist whose contract involves the general take in caring acutely for patients with several problems, and discuss the role of the acute physician and the hospitalist (*Clin Med* August 2012 pp316–19).

I think an alternative or additional way of improving this service is to rethink the role of general practitioners (GPs) and

increase the role of physician assistants. (I had a physician assistant in America; as I am a cardiologist and he was trained in gynaecology this wasn't a great help, but the principle still stands.)

GPs are burdened with a great number of minimal problems, so have to take less time with the more serious issues. Their great expertise can be in deciding who is ill and who isn't, and using time as a means of clarifying diagnosis. This is harder to do since the partial loss of the personal GP. They are trained for several years and learn, as junior hospital doctors, to deal with severe conditions appropriately. After a few years in general practice they tend to lose confidence in their ability to deal with conditions which they very rarely see acutely, ie in this area they become 'deskilled'. However, their training need not be lost.

In hospitals it is hard to find a truly general physician who has a wide range of expertise because virtually all specialists now spend so much time learning how to perform procedures of various sorts, and doing so. The new acute medicine specialists pass their patients on or out, leaving only the paediatricians and geriatricians as specialists with a range of knowledge across an age group. This leaves quite a lot of the population out!

One solution to this situation would include the following elements:

- (a) A physician assistant as the first port of call in general practice. These could be nurses with additional training to cover diagnostic skills, but someone trained specifically for the job would perhaps be better.
- (b) GPs being available in the practice for referrals from the assistant. The reduction in their surgery numbers would allow them to take more time with more difficult problems. The GP would also see their patients or the practice's patients in hospital, acting as the patient's primary physician (they would only have a few patients at a time), helped by the appropriate specialist. This would produce continuity of care for the patient through admission and after admission, and allow the GP to maintain their skills at a higher level.
- (c) The specialist, therefore, would spend

less time on daily management of the patient and would have more time available for interventional procedures. Many specialists long for this situation.

I have seen this plan work well in America and I think it would work well for everybody.

RICHARD A BEST  
Department of Cardiology, Airedale  
General Hospital, Keighley, Yorkshire

## US-style hospitalists are unlikely to improve delivery of patient care in the NHS

Editor – Over the last 15 years, I have watched the increasing impact of physician specialists, known as hospitalists, on the delivery of patient care at the institution where I have my principal appointment. More recently, I have had the opportunity to interact with hospitalists at two other medical centres (one a university hospital, the other a community hospital). Accordingly, I read with great interest Kirthi *et al*'s recent paper advocating a clinical leadership role for hospitalists in the National Health Service (NHS) (*Clin Med* August 2012 pp316–9) as well as your accompanying editorial (*Clin Med* August 2012 pp 307–8).

Few hospitalists in the US have trained specifically for hospital medicine. Indeed, in a recent survey, it was found that only 1 in 50 hospitalists had either completed or were currently involved in a hospital medicine fellowship.<sup>3</sup> The typical hospitalist's post-graduate training is limited to three years (most often in general internal medicine). In addition, 55% of the current pool of US hospitalists have only been practising as hospitalists for five years or less.<sup>1</sup> Accordingly, Kirthi *et al*'s attempt to equate US hospitalists with NHS general physicians is somewhat misleading, at least with regards to depth of training and experience.

There have emerged national hospitalist management companies that individually employ often hundreds of hospitalists in facilities throughout the US. One particular company employs physicians in 900 facilities (including the three medical centres at which I work) in 27 states.<sup>2</sup> Such private companies provide intense instructional programs, teaching billing and coding,