## **Health, Wellbeing and Local Government Committee**

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## Committee Inquiry into Stroke services in Wales – Written evidence from Dr T A T Hughes

Neurosciences Directorate Department of Neurology

Consultant Neurologist - Dr T A T Hughes Medical Secretary - Linda Gwyther-Jones

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To the Clerk of the Committee, Stroke Services in Wales, The National Assembly for Wales, Cardiff Bay, CF99 1NA

Dear Sir/Madam,

I would like to submit the following written evidence to the inquiry into Stroke Services in Wales.

I am a Neurologist in the University Hospital of Wales (UHW) and I am the principal investigator in UHW in the 3<sup>rd</sup> International Stroke Trial (IST-3). We have been giving thrombolysis (clot-busters) to stroke patients since 2006 and have done it as part of the IST-3 trial since October 2007.

I think the terms of reference of the inquiry are very wide ranging and although all of the services mentioned in the call for evidence are important there are some key stages of stroke care which, if improved, will lead in their slip-stream to improvements in adjacent areas of practice.

The first is the diagnosis. The word diagnosis rarely appears in documents relating to stroke perhaps because it is assumed that this is straightforward. In some cases this is true, but with a new urgency attending the diagnostic process it is more difficult for clinicians to be certain that they are not being caught out by one of the many stroke mimics. The situation is compounded by the fact that a plain CT scan does not always provide a positive diagnosis of ischaemic stroke, rather it excludes some of the ischaemic stroke mimics such as intracerebral haemorrhage or brain tumours. Therefore I would recommend that the diagnostic process is prioritized and every effort made to enhance the skills that clinicians have at the front door of the hospitals across Wales. There needs to be a greater emphasis placed on the teaching of diagnostic neurology for both undergraduate and postgraduate students but as a matter of urgency the clinicians need some time out to attend structural teaching sessions focusing on the different presentations of acute stroke, and its mimics.

The second key issue is the radiology and the radiography. A plain CT of the head must be performed in all patients presenting with symptoms suggestive of an acute ischaemic stroke and this must be done immediately, or as soon as possible after presentation. This is a considerable challenge for stroke services and requires resident radiographers, a CT scanner, and a system which allows radiologists to interpret the images, either on site or on-line.

It is absolutely crucial to the development of any acute stroke service that the radiology and radiography services are prioritized. This will become even more important in the future because more detailed and more sophisticated scanning techniques will allow radiologists to judge whether or not thrombolysis (clot-busters) are appropriate, regardless of the time of onset of symptoms. Therefore the urgent clinical assessment and the urgent scanning are the two areas of practice that require structured support if patients are to have a chance of receiving thrombolysis.

However, the corollary of the above is of even greater concern to me. It will not be possible around the clock for all the hospitals in Wales to offer the package of an immediate senior clinical opinion and immediate interpreted imaging. There will have to be regional stroke networks to orchestrate an out of hours acute thrombolysis service and this will entail triage of patients by ambulance staff and the need for ambulances to by-pass hospitals not offering a thrombolysis service. This has implications for a number of services, notably the ambulance service, radiographers and radiologists, and the physicians organizing the acute medical take.

The review of stroke service in London provides some helpful indications of the sort of radical thinking that is required (<a href="www.healthcareforlondon.nhs.uk">www.healthcareforlondon.nhs.uk</a>). They have estimated that only about 10 units across the whole of Greater London will need to offer a thrombolysis service to ensure that the whole population is able to get to a unit within 30 minutes.

Therefore, I would like to bring to your attention the problems related to getting an accurate clinical and radiological diagnosis and the implications of this for out-of-hours services.

Yours sincerely,

Dr T.A.T. Hughes MD Consultant Neurologist