What are the risk factors for TIA and stroke in Newport?

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Aims

Ischaemic stroke / transient ischaemic attack (TIA) is not a single disease, but a heterogeneous condition with several very different pathophysiological mechanisms. Identification of the underlying cause of stroke is important for several reasons. Given that strokes (and consequentially TIAs) are the third most common cause of death in the UK, it is vital to study and understand the risk factors, in order to plan strategically for stroke prevention. There are no previous studies about the stroke/TIA risk factors in Newport.

Methods

We studied 110 cases of stroke, TIA or mimics in patients who presented at the Royal Gwent Hospital between 9 February 2015 and 8 March 2016. The patients either presented acutely or were referred to stroke clinics by their general practitioners. Using the Clinical Work Station system (which is the Aneurin Bevan health board's patient database) and the patient's clinical record number, we were able to identify 110 patients with the above criteria and accessed their details.

We have classified all patients according to their age, gender, date of admission/clinical presentation, diagnosis and identified risk factors for vascular events. We captured this data and composed a spreadsheet using Microsoft Excel, enabling us to analyse the common themes.

Results

The mean age of all patients studied was 72.2 years, with the median being 71.5 years. 51 patients (46%) were female and 59 (54%) were male. 52 patients (47%) of those studied had a TIA, 36 (33%) had a stroke, and 22 (20%) had a mimic with 18 (82%) having had a previous stroke, with 4 (18%) having had previous TIAs.

With regards to risk factors, 62 patients (56%) had hypertension and 24 (22%) had type 2 diabetes mellitus with 20 (18%) having both. 20 patients (18%) had hyperlipidaemia, 15 (14%) had atrial fibrillation and 11 (10%) had ischaemic heart disease. 5 patients (4%) are currently smokers with a further 5 (4%) having smoked in the past. 73 patients out of the 110 patients studied (66%) had more than one risk factor.

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Conclusion

As in other areas, hypertension was indeed the most significant risk factor associated with strokes and TIAs in Newport, followed by type 2 diabetes mellitus and atrial fibrillation. Our study particularly highlights the prevalence of stroke and TIAs at a younger age in men to be higher in Newport in comparison to the UK average. Also, in our data, 20% of those who present acutely or in clinic have mimics and didn't actually have either a stroke or a TIA.

Conflict of interest statement

I certify that no funding has been received for the conduct of this study. I have no other conflict of interest.