Stroke and Neurofibromatosis… Is there a link?

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Here we present a case of a 49-year-old woman who developed a left-sided hemiparesis. Given the patient’s age, this is a rather rare occurrence along with the fact the patient had no known risk factors predisposing her to a cerebral vascular accident (CVA), or did she? She has a background of neurofibromatosis (NF) and epilepsy. During a ward-round, the patient asked what seemed to be a perfectly reasonable question given her current admission; she asked whether her NF increased her risk of developing a stroke? This was a question which couldn’t be answered as precisely as if the patient had asked if there was a link between hypertension, hyperlipidemia, or diabetes and stroke. Upon investigating the patient’s question, it was revealed that there are published case reports of NF predisposing younger patients to a stroke; however, the strokes described were predominantly haemorrhagic in nature. We identified at least eight case-reports of ischaemic stroke in adult patients with NF1 from a basic search of the literature. However, only one was alike to our lady in that her NF1 was not complicated by either rare NF1 genetic mutations or coexisting co-morbidities. Whilst no formal genetic tests were performed during our patient’s admission, angiography was used as the gold standard diagnostic tool for vasculopathy. In all identified case-reports an occlusive/stenotic form of vasculopathy was identified, although no significant vascular changes were identified from MRA with our patient. Audience will gain knowledge on: stroke in anyone under 65 years requires a young person stroke screen; educate patients with NF, that there may be a link between stroke and NF, however it is not proven; and clinical decision on the risk/benefit ratio is required whether patients with NF require any primary prevention. A more detailed study, either a randomized controlled trial or a cohort study is required to aid answering this complex question.

Biography

Hardeep Sahota is a NHS Doctor in UK and currently working at Chelsea and Westminster NHS Foundation Trust. His long-term ambition is to follow a path in Neurosurgery. He is also a fully qualified Pharmacist in Great Britain. He completed his Medical degree at Bristol Medical School.

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