An unusual case of new onset unilateral headache with nausea following a fall

Musarat Tufail (1)
Lubna Saghir (2)

(1) Dr Musarat Tufail- MbCHb, MRCGP, DCH, DRCOG, DFSRH, PGCME. Family Medicine Consultant, Primary Health Care Corporation, Qatar and Sessional GP, United Kingdom.
(2) Dr Lubna Saghir -MBBS, MRCGP, PgDip Primary Care Diabetes, MsC Insulin Management, PgDip Clinical Dermatology. Family Medicine Consultant, Qatar and sessional GP, United Kingdom

Corresponding author:
Dr Musarat Tufail- MbCHb, MRCGP, DCH, DRCOG, DFSRH, PGCME.
Family Medicine Consultant, Primary Health Care Corporation,
Qatar and Sessional GP, United Kingdom
Email: mtufail@phcc.gov.qa

Received: January 2021; Accepted: February 2021; Published: March 1, 2021.
Citation: Musarat Tufail, Lubna Saghir. An unusual case of new onset unilateral headache with nausea following a fall. World Family Medicine. 2021; 19(3): 129-131 DOI: 10.5742/MEWFM.2021.94016

Abstract

Headaches are a common presentation in family medicine. A detailed history including which medications the patient is taking, needs to be taken into account when formulating the list of differential diagnoses. As a Family Physician it is vital to remain analytic and mindful of the red flag symptoms. Obesity and the use of Combined Oral Contraceptive pills (COCP) can be contributory factors for a headache such as Idiopathic Intracranial Hypertension (increased pressure within the skull) and Migraine. In the case below, we discuss how these two risks factors led to a thrombosis picture, which initially presented as a unilateral headache. It highlights the importance of considering the multifactorial nature of General Practice and the need for the clinician to practice holistically and consider the patient as a whole.

Key words: headache, nausea, COCP

Case History

A 34-year-old lady presented to the practice with a one-day history of vertigo, and nausea. This caused her to fall and she had hit the left side of her head. She also described a headache on the side where she had landed, and had not taken any analgesia. On examination, she was tachycardic to 100 beats per minute, normotensive with a blood pressure of 110/70 mm Hg. There were no signs of focal neurology but she seemed to be in some distress. A Hallpike test was done and this was positive to the left. A past medical history revealed she was fit and well but she had flare ups of benign positional paroxysmal vertigo. Her drug history consisted of Microgynon 30 once daily (combined oral contraceptive pill) and an antihistamine Proclorperazine for the vertigo. She was a non-smoker and drank minimal alcohol. Her Body Mass Index (BMI) was 36 kg/m^2. The GP advised her to go to the Emergency Department to rule out a possible subdural but patient declined this and wanted to go home. After a few hours, she started to vomit and complained of worsening left sided headache and started to hold onto her head. She went straight to the Emergency Department. On arrival her observations were stable and Migraine headache was considered as the most likely cause of her symptoms. During her stay at the Emergency Department, the headache worsened so a Computer Tomography (CT) scan was carried out. This revealed a sinus venous thrombosis. A Magnetic Resonance Venogram was recommended and showed thrombosis of the left transverse and sigmoid sinus. Cerebral Venous Thrombosis (CVT) is an uncommon disorder. However it has higher tendencies to occur in female patients younger than 40 years of age, smokers and or those with thrombophilia. Women who are pregnant and those who are taking hormonal contraceptive therapy are at risk (Fayaz, 2012) and in this case her BMI also needs to be taken into account as a confounding factor.

Discussion

The case has highlighted the medical complexities associated in patient presentations and the diagnostic conundrum they create in Primary Care. It is crucial to consider the patient as a whole and take the time to explore the background with a detailed system review and medication history. This case presents learning related to more than one system involvement, which can occur simultaneously. Also it appreciates that one aspect can have a knock on effect on another. The reflections from the case highlight that the link between COCP and raised BMI was not captured early on. This led to increased risk of thrombophilia and the presentation of headache which was diagnosed as CVT. This discussion will cover the importance of capturing the links that form the basis of the development of the pathology. Headache, Contraception and Obesity are common areas that are explored on a daily basis in primary care and the discussion aims to take clinicians through the process of a patient review, bearing the presentation in mind. Headaches are a very common pain condition that will affect most people during their lives. The main symptom of a headache is a pain in the head or face. This can be described as throbbing, constant, sharp or dull. Patients often present with comorbidities when diagnosing headache. The NICE guidance on headaches (NICE, 2012) lists signs and symptoms that warrant a consideration of investigation, of which neurology, fevers, trauma, sudden onset and visual changes are features often considered in primary care. See Table 1 for a list of these.

Table 1: Red Flag Headache Presentations

- worsening headache with fever
- sudden-onset headache reaching maximum intensity within 5 minutes new-onset neurological deficit
- new-onset cognitive dysfunction
- change in personality
- impaired level of consciousness
- recent (typically within the past 3 months) head trauma
- headache triggered by cough, valsalva (trying to breathe out with nose and mouth blocked) or sneeze
- headache triggered by exercise
- orthostatic headache (headache that changes with posture)
- symptoms suggestive of giant cell arteritis (scalp tenderness, jaw pain, fatigue, double vision)
- symptoms and signs of acute narrow-angle glaucoma (eye pain, nausea and vomiting, blurred vision, halos around lights)
- a substantial change in the characteristics of their headache.

In Cerebral Venous Thrombosis, there is a raised intracranial pressure and the patient presents with early morning headaches, nausea, altered levels of consciousness, papilloedema (optic nerve at the back of the eye becomes swollen) and seizures. Diagnosis is made via clinical suspicion and confirmation is done on imaging with computed tomography venogram or magnetic resonance angiogram (Fayyaz, 2012). Worsening advice should include the signs and symptoms the patient must look out for, actions to take should they arise and a specified follow up. A headache diary is very useful in helping with diagnosis and understanding the impact it is having on the patient (NICE, 2012)

- to record the frequency, duration and severity of headaches
- to monitor the effectiveness of headache interventions
- as a basis for discussion with the person about their headache disorder and its impact

This is in guidance with the RCGP curriculum where GPs should manage 'risk effectively in consultations, safety netting appropriately' and also 'provide appropriate documentation for each patient contact' (RCGP 2019). In this case it is important to point out that this lady was taking the COCP. The increasing prevalence of obesity around the world is requiring all clinicians to reflect on patient management and outcomes. The safety and efficacy of a drug needs to be considered when managing a patient with obesity. Levels of obesity are continuing to rise globally (WHO, 2013). Obesity is increasing in women of reproductive age and it is critical that safe contraceptive measures are utilized to minimize the increasing risk of obesity and pregnancy related complications. It is vital for clinicians to appreciate the dynamics of safe prescribing of contraception in women with raised BMIs. As per the UKMEC (United Kingdom Medical Eligibility Criteria for Contraceptive Use), women who have obesity (BMI categories of ≥30–34 kg/m^2 and ≥35 kg/m^2) of any age, taking any oestrogen containing contraception (i.e. combined hormonal contraception (CHC), including combined oral contraception (COC) containing both ethinylestradiol (EE) and estradiol, patch and ring) are categorised as UKMEC 2 or 3, depending on BMI. They are in these categorizations primarily because of the increased risk of Venous Thrombosis Embolism (VTE). (FRSH, 2016) As per the UKMEC (FSRH, 2019) it is crucial that women with obesity are informed of the risks associated with CHC:

► risk of thrombosis increases with increasing BMI.
► current CHC use is associated with increased risk of VTE.
► current CHC use is associated with a small increased risk of MI and ischaemic stroke.
► if BMI is ≥35 kg/m^2 the risks associated with use of CHC generally outweigh the benefits.

These UKMEC 2 and 3 classifications, indicate safety concerns for obese women using CHC and are related to cardiovascular risks from exogenous oestrogen, including VTE, acute Myocardial Infarction (MI) and stroke. They are based primarily on evidence that obesity and CHC are both independent risk factors for thrombosis (Murphy, 2010). This is a significant learning and key point. The base line risk of VTE is two fold greater with increasing BMI compared to normal BMI (Wattanakitt et al., 2012). It highlights that in this case the headache presentation and the rare diagnosis of cerebral thrombosis was confounded by two independent risk factors for thrombosis that were in play simultaneously. The significance of the learning here is the importance of clear history taking and documentation. Contraception in the Middle East is available over the counter and at times patients do not feel it is appropriate to declare as medication that they are taking as some may not consider it to be therapy. The case appreciates the multifactorial nature of primary care and the need to keep all hats on during a consultation. This is what sets Family Medicine aside from other disciplines; the ability to appreciate a patient as a whole story rather than chapters.

References and further information

Fayaz, A. Headache disorders: differentiating and managing the common subtypes. Br J Pain. 2012 Aug; 6(3): 124–132.

FSRH UKMEC Guidelines 2016 FSRH (2019) Guideline Overweight, Obesity and Contraception. Available at https://www.fsrh.org/standards-and-guidance/documents/fsrh-clinical-guideline-overweight-obesity-and-contraception/

Murthy AS. Obesity and contraception: emerging issues. Semin Reprod Med 2010;28:156–63

NICE (2012) Headaches in over 12s: Diagnosis and Management. Available at: www.nice.org.uk/guidance/cg150> The RCGP Curriculum 2019 [online]. Available at https:// www.rcgp.org.uk/training-exams/training/gp-curriculum-new/clinical-topic-guides/ neurology.aspx

Wattanakit K, Lutsey PL, Bell EJ, et al. Association between cardiovascular disease risk factors and occurrence of venous thromboembolism. A time-dependent analysis. Thromb Haemost 2012;108:508–15.

World Health Organization. Nutrition, Physical Activity and Obesity: United Kingdom of Great Britain and Northern Ireland. Geneva, Switzerland: World Health Organization Regional Office for Europe, 2013. http://www.euro.who.int/en/nutrition-country-profiles