Unexpected outcome (positive or negative) including adverse drug reactions

Fluoxetine-induced pill oesophagitis

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Summary

Pill-induced oesophagitis is well reported in people of all ages (range 3–98 years), with females outnumbering males by 1.5:1. Antibiotic pills, cardiac pills and non-steroidal anti-inflammatory drugs and alendronate are the most common culprits. We report a case of fluoxetine-induced pill oesophagitis in a young adult without any underlying pathological abnormalities of the oesophagus.

BACKGROUND

We decided to write the case to report fluoxetine-induced oesophagitis, which has not been reported so far in the literature. This case highlights the importance of a proper technique of swallowing medications to avoid complications, like corrosive injury of oesophagus, and the correct administration of medication, which does not end with writing a prescription but rather entails explaining how (and when) to take a medication.

CASE PRESENTATION

A 24-year-old man presented to the emergency department at 22:00 with severe retrosternal pain of 2 h duration. The patient had gone asleep after swallowing a capsule of fluoxetine 20 mg, available as an on-the-counter prescription, for premature ejaculation. On further questioning, the patient acknowledged taking little water with capsule and going recumbent immediately. The patient woke up with severe pain and could not swallow water and refused solids because of chest pain. Patient was stable haemodynamically and had normal baseline investigations including complete blood counts and chest radiograph. Electrocardiograph was normal. Patient took a few bananas and was discharged with reassurance.

Next morning, the patient reported with painful swallowing and dysphagia. The patient was taken for oesophagogastroduodenoscopy, which showed three fourths of the lumen of the oesophagus ulcerated with denuded mucosa at 22 cm from the incisors (figure 1). Intravenous pantoprazole and chewable sucralfate was started in addition to intravenous fluids. The patient improved and was able to swallow liquids and discharged from hospital on sucralfate 1 g 4 hourly. On follow-up after 2 weeks, the patient was able to take normal food.

INVESTIGATIONS

- Chest radiograph

- Electrocardiograph
- Oesophagoscopy.

DIFFERENTIAL DIAGNOSIS

- Viral infections like Coxsackie virus causing pleurodynia
- Acute pericarditis (viral)
- Diffuse oesophageal spasm
- Myocardial infarction
- Gastro-oesophageal reflux disease
- Costochondritis or Tietze syndrome.

TREATMENT

- Proton pump inhibitors (added to avoid the worsening of pain due to erosion by possible acid reflux)
- Sucralfate.

OUTCOME AND FOLLOW-UP

The patient improved and is on regular follow-up.

DISCUSSION

The oesophagus may be injured if certain potentially injurious medications (which normally release their contents at sites where these are safe) fail to transit the oesophagus and remain therein, dissolving and releasing their noxious contents and damaging the oesophageal wall. Injury of this type is called pill oesophagitis. Most patients suffer only self-limited pain, but oesophageal haemorrhage, stricture and perforation may occur, and, in some cases, death has been reported.¹ The pills include both tablets and capsules. Medications like antibiotics, cardiac and vascular medications, non-steroidal anti-inflammatory drugs, alendronate, hydroxychloroquine and quinine are notorious for causing pill oesophagitis.^{2 3} Pill oesophagitis has been reported in all age groups and in both men and women. However, some people with pathological disorders like tumours, rings, webs, compression from an enlarged left atrium, hiatus

Figure 1 Sequential endoscopic pictures of ulceration with a prominent vessel but no active bleeding.

hernia and gastro-oesophageal reflux are more susceptible. The other physiological factors like swallowing the medication in recumbent posture, using little water and even swallowing in sitting position and going to supine posture immediately are also likely to increase pill-induced injury.⁴ Diagnosis can be made by proper history, physical examination and endoscopy (oesophagoscopy). Endoscopy most commonly reveals one or more discrete ulcers with normal surrounding mucosa. Ulcers may range from pinpoint to several centimetres in diameter. Diffuse inflammation may surround the ulcer(s) or may occur in the absence of discrete ulceration.⁵ Our patient took the capsule of fluoxetine and immediately went to sleep.

Fluoxetine is being used in depression and fatigue.^{6 7} There are some studies where fluoxetine has been used for treatment of rapid (premature) ejaculation⁸ and this is exploitation of one of the side effects of fluoxetine, that is, delayed ejaculation. Fluoxetine hydrochloride is an acidic drug and is a selective serotonin reuptake inhibitor for oral administration. The adverse reactions include the 'serotonin syndrome', cardiovascular complications, extrapyramidal side effects such as akathisia, dyskinesias and parkinsonian-like syndromes and an apparently increased risk of suicidality. Fluoxetine-induced mania and hypomania, seizures and sexual disorders are reported along with minor symptoms of allergic reactions, stuttering, haematological changes, psoriasis and inappropriate secretion of the antidiuretic hormone.^{9 10}

There is no report in the literature related to fluoxetine as a cause of oesophagitis. We report this interesting case to highlight the fact that all pills are unsafe if not taken properly. Thus, caution is needed while taking medications like fluoxetine with inadequate amount of water, and immediate recumbence after swallowing pills and capsules

and swallowing of medications while lying down must be avoided.

Learning points

- ▶ Fluoxetine-induced pill oesophagitis is reported in an apparently healthy adult.
- ▶ Medications must be swallowed with enough water to encourage transit into the stomach.
- ▶ Medications must be swallowed in a sitting or standing position to allow gravity play its role.
- ▶ High suspicion of pill oesophagitis is a must in patients awakened by pain from sleep with a history of pill ingestion prior to going to sleep.

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Competing interests None.

Patient consent Obtained.

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