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Abstract

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Antibiotic treatment and Fibromyalgia-like symptoms development: only a coincidence?

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Abstract

Background:

Antibiotic treatment, in particular Fluoroquinolones (FQs) have been reported as possible trigger for the development of painful sequelae, most of all due to tendon rupture, peripheral neuropathy and carpal tunnel syndrome (CTS). To date, there are no epidemiological studies about the development of musculoskeletal pain or Fibromyalgia Syndrome (FMS) following FQs treatment, while Food and Drug Administration (FDA) recently included this antibiotics in a “black box warning” for the possible development of fibromyalgia-like symptoms.

Case Description

Male patient aged 60, past history of substance abuse. In april 2023 levofloxacin treatment (5 days) for suspected prostatitis. At the end of treatment, the patient complained of widespread pain with stiffness in the legs and hands. A neurological examination was inconclusive. At our examination, performed after 2 months, the patient still complains of widespread pain (Widespread Pain Index 19/19, 5/5 body areas), even at night, described as throbbing and migrating, associated with pins and needles, sensation of swollen and rubbery limbs. He also complains of extreme fatigue and exhaustion, irritable bowel syndrome (IBS), headache, muscle stiffness, difficulty at work, sleep disturbances and unrefreshing sleep, joint pain, muscle spasms and clonus, numbness in the hands or feet, tingling, dry nose and itching (SS 7/12). He reports swelling in the ankles and hands, while these features were not present at examination. NSAIDs and acetaminophen treatments were ineffective. At the end of examination, we temporarily concluded for Widespread Pain of uncertain origin and recommend neurological re-evaluation after execution of EMG and ENG, and rheumatological evaluation. In the meantime, we start with pregabalin cp 25 mg 1 cp in the evening, with progressive dose increasing scheduled to reach at least 75 mg BID.

Discussion

Although Fibromyalgia Syndrome (FMS) is actually attributed to an imbalance in the management of pain sensation in the brain currently referred to as “nociceptive pain”, many other etiologies have been indicated as possible triggers of this complex pathology. In particular, persistent Fibromyalgia-like symptoms have been reported after bacterial infections and subsequent antibiotic treatments, viral infections and their treatments, vaccinations and other iatrogenic causes. Regarding FQs treatments, a recent report on 5148 FMS patients showed that the risk of FMS with FQs is similar to amoxicillin and azithromycin, indicating that the association between antibiotics and FMS may be possibly due to bacterial and viral infection and not to subsequent antibiotic treatment (1).

Conclusions

Even if fibromyalgia-like symptoms are increasingly reported after antibiotic therapy, the origin of these pictures is still uncertain. The possibility that these painful sequelae may also be due to other etiologies requires an in-deep exclusion of any concomitant pathology.

References

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