Letters to the editor

Akathisia associated with prochlorperazine as an antiemetic: A case report

Akathisia is generally an iatrogenic syndrome characterized by a compelling need to be in movement, accompanied by motor restlessness and a strong subjective feeling of distress. It is a frequent (20%–50%) complication of dopamine-blocking medications; however, it is often not recognized by physicians and rarely reported by patients [1–3]. In fact, it is frequently misdiagnosed as a psychiatric disorder. The following case report is a reminder of this neuro-toxic side effect of a commonly prescribed antiemetic, prochlorperazine, and suggests considering alternative pharmacological therapies for chemotherapy-induced nausea in cancer patients.

A 38-year-old married white woman was admitted to the National Institutes of Health for treatment of Burkitt’s lymphoma. Ten weeks after her admission, an emergency psychiatric consultation was called to assess her severe ‘anxiety and depression’ which had been unresponsive to benzodiazepines. The patient was four months post-partum at the time of the consultation. History revealed that after years of infertility treatments and multiple miscarriages, she had delivered a healthy boy. Within weeks after the birth, she was diagnosed with Burkitt’s lymphoma. She had no other previous history of medical, surgical or psychiatric illness. At the time of the psychiatric evaluation, she had successfully completed a chemotherapy treatment protocol. She had received prochlorperazine 10 mg i.v. as needed for chemotherapy-associated nausea for 42 days and usually received two doses per day. Two days prior to the consultation, she received a total of 50 mg i.v. of prochlorperazine. The following morning, she reported feeling unusually restless. She was initially treated with oral lorazepam, temazepam and alprazolam without substantial relief. She continued to complain of feeling extremely restless, and her discomfort progressed to the point of pacing the halls. She was again treated with oral diazepam, with minimal relief. As her distress mounted, the staff hypothesized that she was anxious and depressed about returning home to care for her infant, and consequently requested a psychiatric evaluation.

On examination, the patient denied feeling depressed or worried about returning home. She did describe an intense feeling of internal restlessness and an inability to sit still. She complained of feeling exhausted yet unable to relax. Significant findings on her mental status exam included masked facies, psychomotor agitation, and a fine hand tremor. A diagnosis of a drug-induced akathisia was made and the prochlorperazine was discontinued immediately. Simultaneously, she was treated with a single long-acting benzodiazepine, clonazepam (0.25 mg p.o., 2–3 times a day), with complete resolution of the akathisia within four days.

This case illustrates several points. Most importantly, it should be emphasized that akathisia is a very distressing side effect of dopamine-blocking drugs, including prochlorperazine, which can easily be mistaken for anxiety and/or depression. It is particularly notable that in a recently published study, a large majority of cancer patients stated that they would not have mentioned their symptoms of akathisia if not explicitly asked about them [3]. In addition, this case highlights the importance of establishing a therapeutic ‘best dose’ when using a neuroleptic medication as an antiemetic. The exact metabolic fate of prochlorperazine has not been clearly established, consequently, we are uncertain whether receiving prochlorperazine for six weeks created metabolite accumulation or just that the one day of high dose prochlorperazine (50 mg i.v.) caused the sudden onset of akathisia [4]. Since benzodiazepines do not all share the same pharmacodynamic properties, it should not be surprising that the therapeutic results for akathisia are different. As evidence, this is a second case report of a patient responding to clonazepam but not to diazepam for neuroleptic-induced akathisia [5]. Finally, medications such as the 5-hydroxytryptamine (5-HT_3) receptor antagonists have shown to be as effective as traditional antiemetic regimens in cancer patients and with fewer side effects than the neuroleptics [6–8].

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References