

# Chronic Dysarthria and Metoclopramide

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Metoclopramide (US brand name, Reglan) is a  $D_2$ -blocker and effective antiemetic. Extrapyramidal side effects (including true dystonic reactions) occur more commonly in young women (Pinder RM, Brogen RN, Sawyer PR, Speight TM, Avery GS: Metoclopramide: a review of its pharmacological properties and clinical use. *Drugs* 12:81-131, 1976).

An otherwise healthy 25-year-old woman admitted for laparotomy received metoclopramide (10 mg) and pethidine (50 to 100 mg) intramuscularly every 6 hours for 72 hours preoperatively. An uneventful laparotomy revealed large bowel obstruction due to adhesions (cholecystectomy five years previously). Dysarthria was noted on the first postoperative day and was attributed to opiate analgesics. The dysarthria, however, persisted for six weeks (severe for four), when complete recovery occurred. There was no history of neurological illness or administration of other drugs known to cause extrapyramidal side effects. No evidence of any other neurological abnormality was discovered on physical examination postoperatively.

The recommended metoclopramide dose for adults is 10 mg three times daily (not to exceed 0.5 mg per kilogram of body weight). This should be observed and particular caution exercised when the drug is given to young women.

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## Locked-In Syndrome for 12 Years with Preserved Intelligence

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No systematic investigation of mental function in patients with "locked-in" syndrome has been reported to date [4], possibly because chronic cases of this condition are exceptional [1, 3]. We have studied a man who since 1969 has been living in a chronic "locked-in" condition. This patient

at age 20 sustained an acute, violent headache with left hemiparesis followed by coma. Details of the hospitalization are not known. He was discharged with a typical picture of locked-in syndrome attributed to an "encephalitis." His condition has been stationary ever since: he has a spastic tetraplegia, which confines him to a wheelchair, and a horizontal gaze palsy. Minimal right-left rotation of the head is possible with effort. No sensory deficit is apparent. The patient is speechless, but responds to oral and written questions using vertical eye movements (downward means "yes"; upward, "no"). The results of electroencephalography, computerized tomographic scan, otoneurological examination, and electromyography of the orbicularis oculi muscle point to a lesion in the ventral pons, presumably due to an acute brainstem infarction.

A battery of psychometric tests was administered, including Raven's Colored PM 1938 for nonverbal intelligence [5], De Renzi and Vignolo's Token Test for auditory language comprehension [5], Benton's Line Orientation test for visuospatial judgment [2], and an extensive reading comprehension test devised by us. Each test procedure was modified to make it suitable to the patient's yes-no response. No deficit was found on either the verbal or visuospatial tasks and only mild impairment on the Raven PM (26 correct answers out of 36).

In our view, the interest of the case is twofold: theoretically, it suggests that even a total deafferentation of 12 years' duration, occurring in an adult, does not bring about apparent cognitive disturbances. From the practical standpoint, it stresses the need for humane attention in the management of this condition [6].

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### References

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