DYSTONIC REACTION TO PERPHENAZINE (TRILAFON)

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Since the introduction of chlorpromazine (Largactil) 7 years ago, many related drugs with generally similar actions have been discovered. These drugs include prochlorperazine (Stemitil), promazine (Sparine), trifluoperazine (Stelazine), triflupromazine (Siquil) and perphenazine (Trilafon). They are widely used for their anti-emetic action, as tranquillizers, and for the treatment of migraine and vertigo. In psychiatric practice they are very useful in severely agitated and confused patients, as well as in schizophrenia. Minor toxic effects occur fairly commonly, including rashes, transient hypotension, and manifestations of parkinsonism. Serious side-effects although rare may be bizarre and frightening.

The following case report illustrates an alarming reaction resembling tetanus, which followed the administration of perphenazine.

CASE REPORT

A 30-year-old European man, a bricklayer, injured his back on 11 June 1959. He was diagnosed as having a herniated intervertebral disc at L4–L5. He improved after treatment with leg traction but 2 weeks later severe pain recurred and his spine was manipulated under general anaesthesia. Two days later a plaster-of-Paris jacket was applied and perphenazine (Trilafon) tablets were started in a dose of 8 mg. twice daily. After 48 hours he felt completely well and was discharged.

Several hours after discharge he began experiencing sharp pain in his shoulders and in the muscles at the back of his neck. The pain was not related to any movement, and became progressively worse. His mouth felt dry and his vision was blurred. An hour after the onset of pain he experienced the first of many spasms during which he went into opisthotonus. These spasms were very painful, lasted 2 or 3 minutes each, and recurred about 8 times an hour.

When seen 1 hour after the first spasm he was very anxious and in considerable pain. He was apyrexial, the pulse rate was 96 per minute, and the blood pressure was 110/70 mm. Hg. In the next 20 minutes he had 3 episodes of spasm of the extensor muscles of the neck and spine. During each spasm he went into opisthotonus, his jaws were clenched and his arms were abducted and externally rotated. The spasms were spontaneous and not provoked by any stimuli. Between spasms the pain was less severe, he could open his mouth widely and was able to move all the affected muscles. His vision was blurred and both eyes were deviated upwards. On looking to the left he had diplopia and a fine nystagmus was present. No other abnormal physical signs were elicited. A diagnosis of drug reaction to perphenazine was made and he was given 100 mg. of pethidine intramuscularly.

In the next 30 minutes 3 further spasms occurred, the last of which was milder and shorter than the previous ones. After this they ceased completely. Two hours later he felt better, although his shoulder and neck muscles felt bruised and sore. His eyes were no longer deviated upwards but the nystagmus and diplopia were still present. He was given 1½ gr. of pentobarbital sodium and the next morning he felt well and all abnormal physical signs had disappeared.

COMMENT

The phenothiazine derivatives are extremely useful and widely used drugs. Their side-effects are similar and the commonest one is a syndrome which resembles parkinsonism. Tremor, oculogyric crises and localized muscle spasms have frequently been described and usually disappear after reduction of dose or cessation of therapy. In a few cases anti-parkinsonian drugs may be needed.

In the usual dosage of 4 - 16 mg. daily perphenazine is generally safe, even if used for long periods of time. In psychiatric practice much larger doses have been used without serious incident. Agranulocytosis and choleostatic jaundice have been reported in rare instances as following the administration of some of the phenothiazine derivatives. A further severe side-effect of this group of drugs is a dystonic reaction similar to the one described above. It has been reported after the use of chlorpromazine, trifluoperazine[2] and perphenazine.[1-3] In some of the cases which followed perphenazine administration the reaction occurred soon after commencing therapy. Montgomery and Sutherland[4] mention that a single 4 mg. tablet may be sufficient to provoke this reaction. In the case described in the present article it developed after a total dose of 40 mg. had been taken in 48 hours. There was probably an abnormal sensitivity or idiosyncrasy to the drug.

When the case was first seen the resemblance to tetanus or to strychnine poisoning was more than superficial. Unless one is aware of the possibility of such a drug reaction, considerable worry and confusion may result. The reaction is a short-lived phenomenon and responds rapidly to sedatives.

SUMMARY

A case of a severe neuromuscular disorder resembling tetanus is described. This reaction followed the use of perphenazine and responded rapidly to sedation.

REFERENCES

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