

STUPOR IN INFANTS FOLLOWING THE USE OF NASAL DROPS

A CASE REPORT

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Young infants frequently snuffle because of nose blockage; it may be the result of coryza, regurgitation of milk through the nose, or excessive production of mucus. This interferes with satisfactory feeding and when relief is sought by the mother nasal drops are often prescribed. To-day nasal preparations are included in the flood of modern advertising and salesmanship which is directed at the doctors through pamphlets, booklets and free samples, and it is not always easy to resist these invitations to be in the vanguard of modern therapy. Here we report a case in which the use of Tyzine hydrochloride was followed by marked somnolence and respiratory and depression.

CASE REPORT

M.C. was delivered by Caesarean section on 22 May 1956 in the 35th week of pregnancy because haemorrhage had resulted from placenta praevia; labour had begun 12 hours previously. The infant was blue at birth but satisfactory respiration was established within 20 minutes after aspiration of the mucus from the mouth and stomach contents and the administration of gastric oxygen. Apart from 2 cyanotic attacks the infant progressed satisfactorily; when first weighed at 48 hours after birth he was

3 lb. 6 oz. On discharge at the age of 1 month he was sucking well at the breast at 4-hourly intervals and weighed 4 lb. 1 oz.

At the age of 5 weeks he developed a 'cold' with a blocked nose which caused much difficulty when breast feeding and Tyzine hydrochloride (0.1%) nose drops diluted to 1 in 4 (0.025%) were prescribed, one drop to be instilled into each nostril every 4 hours before feeds. The drops were first used at the 6 p.m. and 10 p.m. feeds on 26 June 1956 and again at midnight because the baby became very restless and irritable and cried; he refused to feed, his breathing remaining noisy. Four hours later drops were again inserted but the baby could not be roused to take a feed and was allowed to sleep until 10 a.m., when drops were used once more. By this time at least 10 drops (and probably more) had been used and the baby remained very somnolent and refused to suck altogether. At 3 p.m., 21 hours after the commencement of the therapy, he was found to be stuporose and pale with gasping and shallow respirations; the pulse rate was 100 per minute and he could not be roused at all. Physical examination did not reveal any localizing signs of infection or other signs of disease and it was concluded that the nose drops were to blame. Nikethamide B.P., $\frac{1}{2}$ c.c., was injected subcutaneously and within 10 minutes the infant had been roused enough for him to begin sucking and take a 3-ounce feed. Thereafter he once more relapsed into a stupor and could not be roused sufficiently for his next feed. At 8 p.m., 10 hours after the drops had last been used, the irregular and gasping respirations were still present, the pulse was 80 per minute, he was pale, and the extremities were cold. He could be roused,

however, by flicking the sole of the foot, which produced a good cry. Because of this he was not disturbed until 2 hours later, when he sucked 2 ounces of expressed breast-milk fairly well. Later he took a further feed and by next morning was quite normal again and eager to feed at the breast.

DISCUSSION

Tyzine hydrochloride has recently been marketed in this country in a 0.1% solution for the relief of nasal congestion by its vasoconstrictive action. On the container it is stated that a weaker solution (0.05%) should be used for infants and children under 6 years of age. The suggested dosage is 1-2 drops for infants and 2-3 drops for young children every 4-6 hours.

From the experience with our case it is suggested that this dosage is too high, especially in view of the difficulty of measuring and instilling one or two drops accurately; it is felt that these drugs should never be used for infants. Other substances such as Privine hydrochloride and ephedrine hydrochloride have also caused drowsiness and marked sedation in infancy (Waring 1945).

Recently Brainerd and Olmsted (1956) reported 3 cases of drowsiness and lethargy in infants following upon the use of Tyzine. They carried out experiments on 19 other infants by administering nasal drops for a period of 1-4 days. Of 25 tests, all in babies under the age of 1 year, 10 produced moderate or severe drowsiness. The severe reactions occurred in those under 6 months.

Neither Parish (1954) nor Menger (1955) reported any ill effects from the use of Tyzine in their cases.

SUMMARY

A case of severe stupor caused by the use of Tyzine-hydrochloride nasal drops in a premature infant is reported. It is felt that drugs such as Tyzine and Privine should not be used in infants under one year of age.

REFERENCES

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