

A CASE OF POISONING WITH NEOANTERGAN *

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For some time antihistamine drugs have been used in the treatment of allergy. Neoantergan is one of these. As with other drugs, Neoantergan develops toxic properties when taken in large amounts by accident or by design¹. We have seen a case of acute poisoning in a child who had accidentally taken too much Neoantergan. Since this is rare, and in all medical literature we have found no other report of a case which was cured, we think our report is worth publishing.

Case: A sixteen month old boy was admitted to our clinic on December 8, 1958, after taking 6 or 7 Neoantergan tablets of 8 mg. which had produced, within half an hour, vagueness, sleepiness, vomiting, cyanosis and tremor in his hands and feet.

Physical Examination: On admission the patient was unconscious, pale and had a dry mouth. His pulse rate was 60 and his blood pressure 90-45 mm. Hg. He was extremely restless, his pupils were dilated and his lips and finger tips were cyanotic. His stomach was washed out immediately but shortly afterwards his eyes rolled, tonic and clonic contractions occurred in his arms and legs and he went into opisthotonos. Luminal, 5mg-kg, was given intramuscularly and oxygen administered. His convulsions continued, his pulse rate dropped to 40 per minute and his blood pressure to 75-45 mm. Hg, and his breathing became irregular. When breathing and heart action weakened and ceased, adrenalin was given subcutaneously. The heart began to beat again. A tracheotomy was performed and oxygen was given through the tube. The convulsions did not cease until an intravenous injection of 2.5 per cent pentothal was given 50 minutes after admission. Gradually the heart beat and respiration improved and the cyanosis disappeared. His daily fluid requirements were calculated and given intravenously. Also 5 cc.-Kg. of blood was transfused. On the same day an erythematous rash developed on the anterior surface of the upper third of the thighs.

Routine laboratory examinations revealed no pathologic conditions.

On the day after admission, though he was drowsy, his pupils began to react, he became conscious and able to speak and take an interest in his surroundings. Two days later his mental condition became normal and he was discharged, fully recovered. Later control examinations of the child in the outpatient clinic revealed no abnormality.

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Discussion

Antihistamines block the effect of histamine on cell receptors and abolish its spasmolytic action on plain muscles and its vasodilator action on the arterioles and capillaries. When injected subcutaneously they give a stronger local anesthetic effect than Novocain. The effect begins 15 to 45 minutes after injection and may last from 4 to 6 hours. One hour after taking antihistamines the concentration in the tissues reaches its maximum. The maximum concentrations are formed in the liver, spleen, kidneys and brain. Antihistamines are destroyed in the liver. Many authors (Dubost, P. Jaulmer, H. A. Dill, A. J. Glazgo, B. Balmer and Otto von Stass) have isolated and identified the antihistamines in body fluids and tissues in poison cases and have calculated colorimetrically and quantitatively their concentration and volume. They have also made pharmacological surveys with extracts obtained from various organs.

When taken in toxic doses, the effect of antihistamines on the central nervous system is to cause loss of consciousness, tremor, disorientation, dilatation of the pupils and mental confusion and illusions. In the gastro-intestinal tract, they may cause vomiting, diarrhea and constipation. In the circulatory system, they cause low blood pressure and tachycardia. In the respiratory system, asthma may result. Agranulocytosis, neutropenia and hemolytic anemia are the results encountered in the blood. Dermatitis is sometimes seen. Death occurs because of the inhibition of respiration and circulation.²

Several authors, (Ryksova, M. Votava, Bastero, Begiristoni, J. H. Duerfeld and D. A. Slade³) have published cases of antihistamine poisoning. Jockum and associates in 1957⁴ reported a case of a 2 year old child who had swallowed 10 tablets of 50 mg. and had died during treatment.

Summary

The case of a 16 month old child poisoned by Neoantergan is presented. The treatment and cure are delineated.

REFERENCES

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