A HUNDRED AND FIFTY YEARS AGO

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TREATMENT OF SYNCOPE AND SHOCK

By T. Lauder Brunton, M.D. D.Sc., Casualty Physician and Lecturer on Materia Medica and Therapeutics at St. Bartholomew's Hospital

FAINTING, SYNCOPE, AND SHOCK differ in degrees rather than kind according to the celebrated surgeon Travers.[1]

The child and the dragoons: fainting and syncope

Below, we have a typical instance, first of fainting, then of death by syncope, following the infliction of intense pain alone without any injury whatever to the vital organs.

In the 17th century one of the Scottish Covenanters, named John Bruce, concealed himself from the dragoons who were in search of him at some little distance from his cottage. His little daughter Alice was accustomed daily to visit him with a supply of provisions.

One day, while on this errand, Alice was unhappily discovered and seized by the dragoons, who at once guessed her purpose from the food she was carrying, and declared that unless she informed them of the place of her father's concealment, they would torture her with thumbscrews.

She refused, and the instruments were applied. Scarcely had a few turns of the screw been made when her face became deadly pale and she fell back insensible. The screw was at once undone, water from a neighbouring rivulet was dashed in her face, and after a deep sigh or two the paleness disappeared and consciousness returned.

Again the dragoons demanded her secret, adding the threat that they would not let her off so easily this time. Again she refused, and the dragoons, irritated by her obstinacy, by a few rapid turns of the screw nearly crushed her thumbs between the jaws of the instrument. A second time the deadly pallor overspread her face, and unconsciousness relieved her pain. This did not suit the purpose of the dragoons, and they again sought to restore her as before. But this time all their efforts were unavailing; the heart had ceased to beat, and the poor child was dead.

Treatment of syncope

In syncope, we first restore the circulation to the brain by laying the head level with the body, or still better, as recommended by Sir Astley Cooper, on a level somewhat lower than the body.

Next we raise the blood pressure by causing the arterioles to contract. We therefore hurry a person who has fainted from the warm room to the cold air, and dash cold water on the face to cause contraction of the vessels on the surface of the body. We also give draughts of cold water to cause contraction of those of the stomach. Besides this we apply ammonia or aromatic vinegar to the nose, to contract the arterioles and so prevent the blood pressure from falling quickly, even should the heart become feeble or stop.

Shock

The causes of shock are: painful impressions – more especially extensive burns – injuries to bones, and, above all, injuries to the abdominal viscera and genitals. The symptoms of shock are: pallor and coldness of the skin, weak pulse, oppressed and sighing respiration, dilated pupils and sickness.

Shock readily follows a blow on the abdomen, sometimes even when the blow is by no means severe. Injury to the genitals is another important cause of shock. Hardly anyone finishes his school days without receiving a blow on the testicles, whether at cricket or during football, and ever afterwards he bears vividly in mind the dreadful depression, weakness, and sickness which instantly overpowered him.

Treatment of shock

In shock we first treat the feebleness of the heart itself, which is due to the action of the vagus, by applying stimulants. One of the most powerful stimulants to the heart is heat. We apply warmth instead to the surface, especially to the cardiac region, over which a hot poultice or India-rubber bottle filled with hot water should be placed. At the same time we give brandy and ether internally.

"Medical students occasionally prevent themselves from fainting, when witnessing an operation, by biting their lips or pinching their fingers"

Second, we cause contraction of the great vessels, especially the veins in the abdominal and thoracic cavities, so that the blood, may be sent onwards to the heart.

"Dr Fayrer has succeeded in recovering a patient from a state of collapse by thrashing his feet and the calves of his legs with switches after other means had failed"

Note that painful impressions made upon the skin cause contraction of the blood vessels. Medical students occasionally prevent themselves from fainting, when witnessing an operation, by biting their lips or pinching their fingers. Its beneficial action in shock is very great. My friend Dr Fayrer has succeeded in recovering a patient from a state of collapse by thrashing his feet and the calves of his legs with switches after other means had failed. Mustard plasters are often applied for a similar purpose.

Reference

1 Treatise on Constitutional Irritation, 1826, p.466.

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