

## PLASTIC-BAG ASPHYXIA IN ADULTS

BY

**J. M. JOHNSTONE, M.D.**

*Pathologist, Grimsby General Hospital, Grimsby*

**A. C. HUNT, M.D.**

*Lecturer in Forensic Pathology, Department of Pathology,  
University of Bristol*

AND

**E. MILFORD WARD, M.D., D.C.P.**

*Pathologist, Leicester Royal Infirmary, Leicester*

The fatal results of the misuse of thin plastic material, particularly plastic bags, have received wide publicity recently in the medical and lay press both of this country and of the U.S.A. If placed over the face or head the soft plastic may become electrically charged, is readily inhaled into the mouth and nose, where it clings tightly, resists removal, and rapidly produces asphyxia (*B.M.J.*, 1959).

Such deaths were thought to be confined to infants and small children, but recently four adult cases of asphyxia due to plastic material about the head have been encountered in unusual circumstances and are reported here.

### Case 1

On the night before his death this single 23-year-old schoolmaster stayed late at school, where he was building a canoe. In the morning his body was found wedged in a tall dustbin in one of the closets in the staff lavatory.

The body was head down, with the knees bent up to the chest and the ankles extended so that only the buttocks, soles of feet, and hands were visible. On the floor, beside the bin, was a woman's shoe, its fellow lying in the lavatory pan. On a looking-glass shelf above the wash-basins were a box of theatrical grease-paints, other theatrical make-up, and some grease-smearing cotton-wool. A large tin of motor grease was placed below the wash-basin, and elsewhere in the room a rubber kitbag containing pieces of net curtain, more cotton-wool, and scraps of rag was found. Beside the kitbag there was a home-made wooden box, hinged in the middle, 1 ft. (30 cm.) square and obviously intended as a mask, with holes for the neck, eyes, and mouth. The inside of the mouth-hole was smeared with grease.

Great difficulty was experienced in removing the body from the bin, which was 19½ in. (49.5 cm.) in diameter and bent slightly oval by the pressure of the body. A small amount of blood from the nose lay in the bottom of the bin.

The trunk was dressed in a plastic mackintosh, with a crêpe bandage crossing over the chest and the ends wrapped about the neck. Below the mackintosh there were three cotton skirts over a thin rubberized raincoat, and below this again a garment made from a large plastic bag by cutting holes for the arms and neck. About the abdomen and between the legs was a sheet of plastic curtain material with some ejaculated seminal fluid on its inner surface. A pair of false breasts, filled with towelling, were strapped over the chest, and the only male garment was a pair of underpants.

A woman's plastic raincap over a rubber bathing-cap covered the head. Net curtaining was tied over the face, which was covered by a "polythene" sheet in which were holes cut for the mouth and eyes. A thick layer of motor grease covered the cheeks and eyes, and, having apparently run, partly occluded the mouth and nose. The face was symmetrically criss-crossed with red and green grease-paint, and blue grease-paint had been smeared over a large area of each cheek.

*Necropsy.*—Death was due to asphyxia. The skin of the face and shoulders was congested and contained large petechiae, and many petechiae were also present in the oedematous conjunctivae. All organs were acutely congested: large petechiae were present in the interlobular tissues of the lungs, with a few smaller ones in the posterior lung surfaces and epicardium.

*Personal History.*—This man, who is believed to have been unduly attached to his mother, came from an artisan home with parents of strong religious beliefs, and he himself attended church regularly. No past history of sexual abnormality is known, and the only association with the opposite sex was recent and concerned the sharing of a common interest in dancing only.

### Case 2

In the early afternoon a 43-year-old engineer drove to a public lavatory known to the police to be frequented by homosexuals. He failed to leave a closet, and was found dead there after forcible entry by the police.

The body was fully and properly clothed except for the jacket, which hung on the door. It was, however, encased from head to foot in a large, thin, transparent plastic bag such as is used to protect long garments, and which measured 6 ft. (1.8 m.) in length and 4 ft. (1.2 m.) in circumference. A handkerchief lay loose inside the bag. The bag was removed by the police before medical examination, and no other unusual feature was found.

*Necropsy.*—Death was due to asphyxia. The organs were acutely congested, and the only petechiae, which were small and few in number, were in the rectum. A bead of seminal fluid was present at the meatal orifice.

*Personal History.*—He was said to be normal, cheerful, and happily married, had a family, and did not have any financial or other difficulties. He had been known to express disapproval of suicide. For some years he had complained of "stomach troubles," for which no organic cause had been found, and in recent months had been in the habit of carrying plastic bags in his car "in case of sudden sickness."

### Case 3

A 23-year-old recently married schoolmaster, after a day spent out with his wife, urged her to retire early as she felt unwell, stating that he would join her shortly. When he failed to do so she came downstairs and found that easy entry to the living-room had been prevented by the carpet being placed against the door. In the room her husband, dressed in shirt, tie, and trousers, lay dead in an armchair. A thin transparent plastic bag, which his wife had left on a table by the chair, covered the head and shoulders. The bag, removed before medical examination, was 2½ ft. (0.76 m.) long and 3 ft. (0.9 m.) in circumference, and two holes, 6 in. (15 cm.) apart and each 2½ in. (6.3 cm.) diameter, had been made close to the open end, where a handkerchief lay. There was evidence suggestive of masturbation.

*Necropsy.*—Death was due to asphyxia. Acute congestive changes affected all viscera, and the only petechiae were in the tips of the duodenal villi.

*Personal History.*—This man, who married a few months earlier, is said to have been rather a poor mixer, somewhat lacking in a sense of responsibility, and rather happy-go-lucky. He had no medical complaints, and there is no known history of any sexual abnormality.

### Case 4

A 21-year-old telephone engineer, in excellent health, was described as having no worries and no interest in women.

On the day of his death he appeared in every way normal, and was left in the house alone for a few hours in the morning. He was found dead about noon, lying face down on a bedroom floor, and clothed only in a pair of women's

panties. Over his head was a plastic bag, 2 ft. (0.6 m.) long and 15 in. (38 cm.) wide, which was immediately removed by the relative who found him: a band of elastic was later removed from the neck by a neighbour who came to help. The body showed evidence of cyanosis, particularly about the face, and bleeding from the nostrils was noted. Death was considered to be due to asphyxia, and a necropsy was not carried out.

### Discussion

The danger of rapid asphyxial death as a result of covering the face with plastic sheeting is very real. Such accidental asphyxia by plastic bibs in infants, and, more commonly, by plastic bags in young children, has been widely publicized, and some American manufacturers now print a warning of the danger on their plastic bags. This type of asphyxia in adults, however, is extremely rare.

In the adult cases described here a possible object in covering the face or head with plastic might be to commit suicide. This seems unlikely, however, as in none of these cases was there a suicide note or threat, none was emotionally disturbed or in any way different from usual beforehand, and the form and place of death were unusual.

If suicide was not intended death must have been accidental, and it is very likely that none realized either the difficulty which might be experienced in removing the plastic material or the rapidity with which asphyxia might occur. It seems almost certain that the plastic sheeting and bags were put on for some purpose, and there is strong evidence that in at least two instances (Cases 1 and 3) the purpose was a sexual one.

In Case 1 the man was clothed as a woman and was obviously a male transvestite who was enacting a sexual scene. It follows that the use of plastic material and rubber garments must have a meaning within the total sexual ritual. However, in addition to having plastic material over his face and body, he was wedged in a dustbin in the foetal position. It might be speculated that his desire to enclose himself was not fully satisfied by covering his face and body by plastic material, and that he had to actualize his fantasy further by entering a rigid framework: if this was the case a possible explanation is that of a desire to return to the womb.

Case 4 is another example of male transvestism, with the additional factor of a constricting elastic band about the neck.

In Case 3 the body was found with head and shoulders covered by a plastic bag and showing evidence strongly suggestive of masturbation. The perversion is less well developed in that he was not clothed in an abnormal manner, but it is possible that he also had some regressive desire to return to the womb. Possibly his activities, and probably his fantasies, were much less elaborate and worked out than in the first case, and he may have vaguely sought after a strange experience without having a clear understanding of what he was doing.

In Case 2 the body was found in a public lavatory known to the police to be a rendezvous for homosexuals. In this case there was no evidence of any sexual activity, but the body was completely encased in a huge plastic bag, and asphyxia would probably occur before any intention could be carried out.

So far as is known, none of these cases were homosexuals, and all appeared to be obtaining a sexual pleasure from a solitary activity. It is clear that two

were transvestites, and from this it is reasonable to postulate that the psychological make-up of the other two was similar.

While not fully qualified to discuss why transvestites should use plastic bags, the nature of the evidence is such that it seems reasonable to assume that all of these cases had some desire to be enclosed or confined, as was the case in two instances, one also being in the foetal position. A desire to return to the womb is said to be a recognized unconscious fantasy, and it is likely that this motivation existed in two of the cases and may well have existed in the others but was less fully expressed.

A much less elegant and more superficial explanation is that these people were trying to achieve some undifferentiated thrill or excitement from partial suffocation or anoxia. This factor may have existed, but it does not explain the transvestism, sexual arousal, or complete enclosure of the body.

It is an interesting reflection that the sexual impulse in man is so protean in its manifestations that a technical advance resulting in a new packaging material can result in a new perverse manifestation.

### Summary

Death from asphyxia in four adult males is described: in three instances a plastic bag was placed over the head and in the fourth plastic and rubber sheeting covered the face.

Two were transvestites, and the psychological make-up of the other two may have been similar.

The evidence suggests that all may have had some desire to be enclosed, and an unconscious desire to return to the womb may have been the motivating factor.

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### REFERENCE

*Brit. med. J.*, 1959, 1, 1463.

## Medical Memoranda

### Facial-nerve Grafting in the Parotid Region

Sometimes the facial nerve is so inextricably involved in a parotid neoplasm that adequate removal of the latter necessitates complete parotidectomy with sacrifice of the nerve. In the past, in such cases, I have then improved the facial appearance with fascia lata or temporal fascia and temporal and masseter muscle slings. Such a repair leads to an almost normal appearance of the face when in repose, but the presence of the paralysis is at once obvious on movement.

Figs. 1, 2, and 3 are photographs of a 55-year-old woman in whom, 11 months previously, I had carried out complete right parotidectomy for neoplastic disease. At the end of the excision there could easily be seen the divided two proximal temporo-facial and cervico-facial branches and five distal branches of the facial nerve, the gaps between the two sets being about 1½ in. (4.4 cm.) long. Two Y-shaped portions of the right great auricular and transverse cervical nerves were then obtained through the lower part of the original incision. These portions were sutured, with fine silk on