

Congenital Defects Due to Thalidomide

SIR.—We were interested to read Dr. M. A. Lécuyer's case report (December 1, p. 1447) of a baby with multiple congenital deformities which were attributed to thalidomide. Similar features were observed at a necropsy recently performed on a baby born in this hospital. In this case, however, the date of prescription of thalidomide has been checked from the original prescription.

Case History.—A woman aged 29 was delivered normally of a 6½ lb. (2.9 kg.) female infant at 41 weeks' gestation. She has one other live normal child aged 8. The mother was prescribed "triptizol" (amitriptyline) 25 mg. t.d.s. on September 14, 1961, for depression, and thalidomide ("distaval") was added on October 10, 1961, 25 mg. daily. One hundred tablets were prescribed. She returned to her general practitioner on January 11, 1962, and reported that she was pregnant (L.M.P. November 26, 1961). Pregnancy was normal throughout. At birth the baby was noted to have gross upper limb deformities and an abnormal, flattened face. On the tenth day of life a systolic murmur was heard for the first time. Her general condition was otherwise good and she was discharged. She returned to the routine follow-up clinic aged 6 weeks in cardiac failure and was admitted to the Royal Hospital for Sick Children, where she died on November 19.

Necropsy.—There was gross shortening of both forearms with absence of ulnar bones and flexural deformities of both wrists. There were only four fusiform digits on both hands and a vestigial thumb had been amputated from the left hand on September 19. The heart was enlarged and showed truncus arteriosus and a high interventricular septal defect. The lungs showed terminal congestion but were otherwise normal. There was a deficiency of the left diaphragm. The left kidney was absent and the right kidney 1½ times normal size. The uterus was unicornuate, the one horn on the right side. All other organs were examined but found normal.

It appears that this woman became pregnant whilst taking thalidomide and continued to take it for four to five weeks after conception. In a recent article in this journal (October 13, p. 944) Drs. C. Lutwak-Mann and M. F. Hay, working on rats, suggest that thalidomide affects the preimplantation embryo, in addition to the toxic effect on limb buds. The generalized abnormalities in this baby are in keeping with this suggestion, and this case re-emphasizes the potential dangers of prescribing any drugs to females of child-bearing age whether pregnant or not.

I am grateful to Dr. J. W. Farquhar for permission to report this case.

—I am, etc.,

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Exposure to Asbestos Dust and Diffuse Pleural Mesotheliomas

SIR.—The letters of Dr. W. J. Smithers and his colleagues (November 3, p. 1194) and of Dr. W. T. E. McCaughey and his colleagues (November 24, p. 1397) draw attention to the association between malignant mesothelioma of the pleura and exposure to asbestos.

In the first letter it is mentioned that the degree of pulmonary asbestosis in these cases of pleural mesothelioma may be variable, and in the second that the duration of the exposure to asbestos dust may be intermittent. It would appear that they have not noticed a recent article in which I describe a new pulmonary

condition, basal asbestosis, and stress its association not only with malignant mesothelioma of the pleura but also of the peritoneum.¹

Briefly, the following points were made:

(1) There is a condition, limited or basal asbestosis, where the lesion is more or less confined to the lung bases, presumably due to the downward movement of the sharp asbestos fibres, before they become asbestos bodies. This produces no pulmonary signs or symptoms, is not evident clinically, and is usually overlooked at necropsy. It will be missed even microscopically, unless sections are examined from the lung bases.

(2) While this basal asbestosis is unlike classical asbestosis in most particulars, it appears to attain locally a carcinogenic concentration, and as this lesion does not shorten the patient's life the carcinogenic action of asbestos can presumably act for a longer period. Indeed, this basal asbestosis may be found later to produce more malignant tumours than classical asbestosis.

(3) In three years in the necropsy service of a teaching hospital six cases of malignant mesothelioma were encountered, three pleural and three peritoneal, and in five of these the basal asbestosis was demonstrated. The lung bases are only a few millimetres distant from the peritoneum over the diaphragm, and the occurrence of peritoneal mesothelioma in basal asbestosis is not unexpected.

(4) In 1961 in four centres in the United States I found nine examples of basal asbestosis out of 15 cases of pleural and peritoneal mesotheliomas in which adequate lung was available for study. In all but two of them the basal asbestosis had been overlooked.

(5) In very few of these cases was an industrial or occupational exposure to asbestos mentioned, but this is of no significance unless direct questions are put to patients or their relatives. What is more important is that the world's annual consumption of asbestos has increased from 500,000 tons in 1942 to 2,400,000 tons in 1961, and that asbestos is to-day used in such a wide variety of manufactured products that, theoretically at least, the number of people who may be exposed to asbestos is enormous, and few of those thus exposed work in factories which are designated asbestos factories.

In January, 1963, will appear an article² in which I draw attention to asbestos as a modern urban hazard. Asbestos is virtually indestructible, and while strontium-90 has a half-life of 28 years asbestos has a half-life of an infinity of years. The article demonstrates on evidence from necropsies that a large and increasing percentage of the population are inhaling asbestos fibres. As these tend to gravitate to the lung bases there will be a cumulative effect, and one wonders if in 20 years' time asbestos-induced mesothelioma may not be as common as cancer of the lung is to-day.—I am, etc.,

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REFERENCES

- ¹ Thomson, J. G., *S. Afr. med. J.*, 1962, 36, 759.
- ² — Kaschula, R. O. C., and MacDonald, R. R., *ibid.*, in press.

Risks of Primary Vaccination

SIR.—Professor G. W. A. Dick (November 17, p. 1275) reprints a table (I) on "Mortality per Million Primary Vaccinations" which seems to me to mislead. There is no mention of the number at risk in each separate age



the abdominal pain. Obviously patients who suffer chronic headaches, from whatever cause, must be judged on their merits. In this respect it is worth noting that Mr. Hanna's second case of appendicitis which he could discover no urinary cause. I had a severe headache 12 hours after the onset of the abdominal pain (personal communication). With the proviso, however, I reaffirm that I have never encountered a true headache that coincided with the onset of the abdominal pain in a case of uncomplicated appendicitis.—I am, etc..

Austell, Cornwall.

D. G. WILSON CLYNE.

SIR.—In the correspondence arising from Dr. H. E. Ding's article (October 20, p. 1028) little has been said about his suggestion that psychological factors might be important. An explanation put forward by George Qvist (November 3, p. 1189) for the surfeit of normal appendices removed is that the symptoms produced by psychologically determined appendiceal disease. However, Professor J. Chassar Moir (December 7, 1967) has pointed out that such pain would be referred to the midline and not the right iliac fossa. There is certainly no evidence that appendicitis, histologically proved, is a psychosomatic disease.¹

However, I believe that in some cases surgeons are forced to operate for quite complicated reasons. I remember a 16-year-old girl who was under treatment with psychotherapy, and who developed abdominal pain. This localized in the right iliac fossa when she believed that this area caused her G.P. most anxiety when he examined her. Twice she was referred to colleagues whom I persuaded not to operate.

On a third occasion she saw a surgeon who did not think that psychological factors were relevant. A small appendix was removed and the patient enjoyed her hospital admission enormously.

General hospitals are used very much more than some doctors believe as sources of care, as refuges from environmental difficulties, and places where conflicts can be resolved. The trouble begins when a patient who prefers his pseudo-organic complaint to solving stresses at a psychological level meets a doctor who considers "the search for the biochemical and structural basis" the exclusive object of clinical inquiry.² That contemporary favourites are pseudo-disk lesions and pseudo-cervical spondylosis.

Dr. J. C. Barker (November 24, p. 1405) has again brought to our attention those who inflict on themselves deliberate disabilities. Such patients suggest that less malignant forms of self-destruction occur and how persistent earnest surgery-seekers can be. The huge numbers of attempted suicides point towards the fact that patients are willing to take considerable risks with their lives and bodies in order to obtain some emotional release which another person might think trivial.

A study of the ways bodily complaints are used in the emotional economy of the person might be of considerable interest. A start could be made with the owners of those bulging case notes containing a record of a visit to every specialist in the hospital.—I am, etc..

W. J.

IAN J. MACDONALD.

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- ¹ Bagge, L. *J. psychosom. Res.*, 1962, 6, 25.
- ² Hill, D. *Brit. med. J.*, 1960, 1, 917.

SIR.—I have been watching the correspondence about errors in diagnosing appendicitis with considerable

interest: for after nearly 40 years, during which I have been diagnosing it, I find I still make mistakes. The extra difficulty in young women is of course particularly well known to those of us who perform have to be both surgeon and gynaecologist (and physician)—at least in acute cases.

Nevertheless, I have waited in vain so far for someone to point out that it is precisely in young women that there is the most to lose if one fails to diagnose a truly present acute appendicitis. I have come across so many young women complaining of sterility and in whom there is a history of appendicitis with pelvic peritonitis.

Personally, in girls and young women I feel it is less harmful for me to do the occasional unnecessary laparotomy in the doubtful case than to risk future unhappiness to the patient from sterility due to adhesions from peritonitis.—I am, etc..

Wairoa, New Zealand.

L. A. RIDOELL.

Exposure to Asbestos Dust

SIR.—I was interested to read Dr. J. G. Thomson's letter (January 12, p. 123) in which he describes the condition basal asbestosis and notes its association with mesothelioma of both the pleura and peritoneum.

In the Department of Radiology of the Royal Victoria Infirmary, Newcastle, a study has been made of calcified pleural plaques occurring in the chest radiographs of asbestos workers. During the last 12 months calcified plaques overlying the diaphragm have been noted in the chest and subphrenic radiographs of two patients attending the casualty department with acute abdominal discomfort. Questioning of the patients confirmed that they both worked with asbestos and in each case there had been prolonged exposure. In neither case was there any history of dyspnoea, which is in keeping with Dr. Thomson's first point. Further investigations did not reveal any cause for the abdominal pain, and it is interesting to postulate that it might be due to peritoneal involvement by asbestos fibres and that abdominal discomfort may be another presentation of asbestosis.—I am, etc..

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J. P. LAWSON.

Drugs for Depression

SIR.—At St. Thomas's Hospital we have for several years now been investigating the value of the newer drugs in the treatment of various types of depression under general hospital conditions. Cases seen are much more akin to those seen in general practice compared with patients in psychiatric hospitals, which generally have to treat only the severer types of depression. And I am sure your Current Practice article on the use of these drugs (January 19, p. 173) is going to mislead many general practitioners about them, and calls for comment and criticism.

For instance, when it is suggested that combinations such as dexamphetamine and amylobarbitone have been shown to be "about as beneficial as a dummy medication," this is certainly not true in the case of the more psychopathic types of depression. In fact, as most general practitioners know, we are facing a virtual epidemic of "drinamyl" (dexamphetamine and amylobarbitone) addiction, simply because it can be so

Exposure to Asbestos Dust

SIR.—Since my communication of February 9 (p. 401) I have learnt that one of the patients referred to in the letter has died. The post-mortem findings are interesting and, I think, relevant to the previous correspondence on exposure to asbestos.

The patient, a man aged 64, who had been exposed to asbestos for 34 years, attended the casualty department of the Royal Victoria Infirmary, Newcastle, with pain in the upper abdomen and left shoulder. This was his most severe attack of pain, although similar but less intense attacks had occurred over the previous 15 weeks. The pain gradually subsided and he was discharged following a barium meal examination, which did not show any abnormality in the upper gastro-intestinal tract. He died several months later and a post-mortem examination, performed in another hospital, confirmed the diagnosis of asbestosis and in addition demonstrated diffuse involvement of the peritoneum by tumour tissue. The gastro-intestinal and other systems showed no abnormality. Histologically this was thought to be either a secondary carcinoma, due to an unknown primary, or a mesothelioma.

—I am, etc.,

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J. P. LAWSON.

New Methods of Resuscitation

SIR.—I was disappointed to read the two letters published under the heading "New Methods of Resuscitation" (January 12, p. 124).

Oral resuscitation was of course known, practised, and taught in the eighteenth century. C. Kite, in his paper on drowning to the Humane Society in 1738, stated: "Direct an assistant to blow into the mouth through a coarse cloth, or use bellows." He realized then the difficulties which still deter the less venturesome. "The blowing into the mouth may upon an emergency answer for a few times, but the difficulty of getting people to continue it will be easily conceived on account of the operation being so extremely disagreeable and troublesome." Electrical stimulation of the heart was also advocated. The nineteenth century showed a steady swing away from mechanical respirators and oral resuscitation to methods which moved the thoracic cage manually.

Both letters refer to mechanical difficulties which the various first-aid organizations have been teaching their members to overcome for the past year. The fact that hundreds of non-medical personnel carry out mouth-to-mouth resuscitation and external cardiac massage efficiently suggests that these procedures are not difficult to teach and understand. This has only been possible by the use of practice dummies mostly made in Norway, where even schoolchildren are taught and have saved lives by using one or both of these methods.

As we in this country have entered this field rather late, the efforts which we must all make in training must be quick, widespread and, more important, co-ordinated. Obviously all doctors must be given the opportunity to practise these methods, to ensure that they are not "put to shame" by first-aid personnel. Many of the latter will of course be only too glad to exhibit their skill to the embarrassment of the untrained doctor.

Airways are unnecessary as an immediate first-aid measure, and should only be used by doctors. A simple anaesthetic airway is usually efficient and enables resuscitation and massage to be carried out from the

side, which is usually more convenient than from the head, which is obligatory if the Brook airway is used. Without an airway the tongue, however toneless, can usually be kept clear provided that the head is well extended and the jaw pulled up with the teeth closed. An airtight seal is not difficult to attain with practice, and exhaustion on the part of the resuscitator is usually due to incomplete clearing of the casualty's airway, too forceful a "blow," or too frequent insufflations. Any feeling of "revulsion" can be overcome by placing a handkerchief or thin cloth over the patient's face and blowing through this. If froth or vomit is troublesome, mouth-to-nose insufflation should be tried. Vomit is, of course, inhaled whether the patient is supine or prone, but in fact can usually be cleared quicker with the patient on his back, which gives a better view of the pharynx, etc., and so causes less interruption with the resuscitation. Vomiting, even following drowning, is not usually very troublesome. It may be that Schaefer's method, which requires pressure on the loins, may be more prone to cause vomiting by resultant abdominal pressure than oral resuscitation. May not most of the water that the advocates of Schaefer's method say is expressed so efficiently from the lungs in fact come from the stomach? Even in the eighteenth century there was doubt as to how much water in fact reaches the lungs themselves.

May I therefore suggest that doctors contact their local Red Cross and St. John Ambulance centres and ask to be shown the models now used in first-aid training, and not be too ashamed to request a demonstration and opportunity to try their "hands and lungs" in an art which unfortunately appears to be currently better demonstrated by "laymen" than medical personnel.—I am, etc.,

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B. S. BAKER.

SIR.—Following the very useful article on "New Methods of Resuscitation" (December 15, p. 1564), and the widespread publicity that "mouth-to-mouth" artificial respiration has enjoyed recently, it is disappointing to read the theoretical criticisms voiced by Dr. T. H. Gillison (January 12, p. 124) and Dr. G. M. Hunter (January 26, p. 261).

While in theory the aesthetic objections can loom large, it has been found that in the heat of an emergency neither medically trained nor lay persons have been deterred by these considerations from using the method to save life. Surely, too, the evidence already presented, both from controlled experimental studies and from a series of cases under emergency conditions in the field, is adequate proof of the superiority of this method.

Of paramount importance in any method of artificial respiration must be the maintenance of a clear airway, otherwise no amount of manual pressure will result in air entering the lungs. In none of the manual methods, however, is this a primary consideration, and indeed only in mouth-to-mouth respiration are the hands free to maintain a patent airway. Because of his position, the rescuer in this technique immediately becomes aware of any obstruction of the airway, can see if the chest expands during inflation, can readily carry out airway toilet, and can feel at once the return of spontaneous breathing. In contrast, the frequent failure of back-pressure artificial respiration methods is due to upper-airway obstruction which goes unnoticed.

Only by mouth-to-mouth respiration can women, and even children, ventilate large adult men, and in addition