Stab Wounds

Stab wounds are caused by the penetration of the point of an instrument, which is usually sharp. If several representative wounds are present it may be possible to obtain a reasonably good identification of the weapon from the wounds themselves. The width can be measured in those wounds which do not show evidence of rocking, and the shape and number of cutting edges can be established from the appearance. The minimal length can be measured by the depth of the wound, but if bruising caused by the hilt of the weapon can be seen then the depth of the wound may be longer than the weapon if the tissues are elastic. Whether or not the wound gapes depends upon the underlying muscle. The appearance and site of the wound may give some indication of the movement of the victim.

Suicidal stab wounds can be most difficult to interpret from appearance alone: sometimes multiple wounds can be self-inflicted, and repeated movements with the knife *in situ* can produce multiple wounds in the viscera. In these cases the site of the injuries may be of assistance. If stab wounds are inflicted with somewhat blunt instruments there may be a "split" in the skin which may be irregular in character.

Conclusion

The interpretation of wounds is a matter of common sense, careful observation, and experience. The most trivial injuries may be of great importance later and should be as carefully described as those of greater severity. Photographic records which can be kept for consultative purposes are invaluable. In a case with a fatal ending the actual lesion itself should be retained.

On no account should the examiner be influenced by the suggestion that nothing is likely to come out of the case and fail to keep a proper record. In all cases in which the presence of gripping or bruising may be of significance the person should be re-examined after 24 to 48 hours have elapsed.

Next Refresher Course Article.—"The Typhus Group of Fevers," by Dr. R. Lewthwaite.

THE GENERAL PRACTITIONER IN THE OBSTETRIC SERVICES OF THE N.H.S.*

BY

**E. FARQUHAR MURRAY, M.D., F.R.C.S.
F.R.C.O.G.**

Emeritus Professor of Midwifery and Gynaecology in the University of Durham

During the last 30 years midwifery in Newcastle has shown a slow but steady advance from a rather poor start. The maternal and foetal morbidity and mortality rates were persistently high in spite of many improvements in technique until recent years, when there was a dramatic change for the better with the advent of the sulphonamides and penicillin and the Flying Squad and blood transfusions.

The maternity hospital 30 years ago—now B.B.C. premises—had 15 beds. It had a small labour ward but no theatre, so that all major work entailing an abdominal operation had to be sent to the Royal Infirmary. The students were not in residence, and I had to give clinical talks to them as they stood in the corridor outside a ward which was too small to allow them to stand near the beds. An Army hut near the entrance to the hospital

was used as an antenatal clinic. This was in 1920, when antenatal care was first officially organized in Newcastle. The bookings for the hospital service were made by a ladies' committee without any medical examination.

It is almost incredible that only 15 beds were available for the teaching of the students and for the medical care of a population of almost a million in Newcastle and Gateshead and their immediate neighbourhood.

The nearest other maternity beds at that time were 16 at North Shields (8 miles), 17 at Bishop Auckland (25 miles), 18 at West Hartlepool (28 miles), 10 at Darlington (33 miles), and 34 at Middlesbrough (40 miles) away.

The following years, including the war, saw a marked increase of maternity beds in the area, and the number is now almost 1,000, of which Newcastle and Gateshead have 220. During these years the home nursing was done by a mixture of handywomen and midwives. Most of the mothers had not had any antenatal care.

Thanks to the late Professor Ranken Lyle a vacant industrial school was taken over and equipped as a maternity hospital of 90 beds. It had a theatre and two labour wards and a well-equipped antenatal department. The students and most of the nurses were now in residence.

At the outbreak of war the hospital was evacuated to its present site and equipped by stages to a 90-bed hospital. Still later the University took over the building and spent much money on improvements. It has now four labour wards, two operating theatres, and a special department for premature and ailing babies.

At this stage the child-health experts and obstetricians shared responsibility for the babies during the antenatal and post-natal periods.

The hospital district, at one time very large, has slowly contracted owing to the larger number of beds available for residential midwifery and to the increasing numbers of municipal midwives; latterly, also, under the National Health Service every pregnant woman has the right to the services of a doctor, and they may prefer to have their babies at home under his care. The hospital authorities have come to an agreement with the doctors and midwives for the students to co-operate with them in their cases. This arrangement is working smoothly. In 1920 there were over a thousand district cases; at the present day they are under 100 a year.

The Flying Squad

In 1935 the Flying Squad was organized as a working unit in Newcastle, based on the maternity hospital. It has saved many lives and been universally copied. The unit consists of a qualified specialist with full equipment for restorative measures and such simple operative treatment—if any—which may be required, and also blood for transfusions. Some squads depend merely on a house-surgeon with blood for transfusion but with no specialist experience.

The Flying Squad has been centred on Newcastle, where we have a team of specialists on call. Independent centres have been established at Sunderland and Middlesbrough, and one is in course of formation at Durham. So long as they have the necessary supply of blood and qualified obstetric officers there is no reason why they should not function. Newcastle still has the major problem of Northumberland and the busy Tyneside area.

For years past the blood of every pregnant woman has been tested for the presence of syphilis. At the present day,

*Opening paper, here slightly abridged, in a discussion before the Newcastle-upon-Tyne Obstetrical and Gynaecological Society, January, 1952.

in addition to the W.R. test, the blood is grouped and the Rh factor determined. If it is negative then the husband's blood must also be tested. The blood may also be specially examined for certain blood states when necessary. These tests are considered to be of vital importance in antenatal care, and the doctor who takes charge of a case is responsible for ensuring that they are done.

Training in Midwifery

The vast majority of students do not carry out a forceps delivery before qualification. It is difficult, indeed impossible, in some centres to provide the opportunity for giving the student such experience. Some teachers are opposed to it in the patient's interest and demonstrate with models. After all, the resident doctors have applied for such posts with a view to getting this very experience.

Replies from 16 of the leading maternity hospitals in England, Scotland, and Ireland showed that there was much uniformity of teaching. Some of the teachers approve of the students having practical training in the application of the forceps but deplore the scant opportunities afforded. Others are against it on principle.

Many teachers, myself included, do not consider that recently qualified students are competent obstetricians. We advise that if they intend to practise midwifery in a general practice they should first hold a resident post in a maternity hospital. Hitherto they have obtained their practical experience by trial and error in domiciliary practice at the expense of much ill-health and suffering by the patients. In earlier days the combination of the novice with the handywoman or an ill-trained midwife must have been somewhat hazardous. When the recently qualified doctor was linked up with an experienced senior things were different.

Before 1923 the practical training of the students was imperfect. Since that date it has been thorough, especially in antenatal care, which is the backbone of obstetrics. In 1949 there was a merger between the maternity and the general hospital, where the students have a further month's clinical instruction and attend cases. They have the added advantage of attending clinical gynaecology at the same time.

The "failed forceps" cases are diminishing in numbers. They were mainly due either to premature application of the forceps with the os still not fully dilated, or to incomplete rotation of the head which was still not in the antero-posterior diameter of the outlet. Many of these cases delivered themselves spontaneously after a short period of rest and sedation in hospital.

There have been some cases of really bad midwifery. Four multiparae with previously normal histories were admitted with ruptured uteri and three of them died. A version had been done late in labour for a transverse presentation. This was before the days of blood transfusions and the Flying Squad.

Anything could happen with the training which existed before 1923 and in a domiciliary service riddled with handywomen, but now with excellent nursing, ample hospital beds, and consultant opinion readily available, with or without the Flying Squad, such mismanagement is inexcusable.

I do not know if doctors settling in country areas are specially questioned about their obstetrical experience. The isolation and the time factor before expert assistance can be available make some such selection desirable, indeed imperative.

The Minister of Health, when the new Service came into being, hoped to divide the doctors into two groups: those who had had previous experience, and those who had not. The undergraduate training did not count. Residence in a maternity hospital or postgraduate training all seemed to count. It was quite impossible to assess the doctors into these two categories. My colleagues and I considered that the time was not ripe for such a classification. One will come in due course, but not for some time.

The first group were to have their names and addresses published in the post offices for the information of the

general public and midwives, and were to get a fee of seven guineas for each case attended throughout, while the unlabelled and unpublished were to get a fee of five guineas for similar services.

The recently qualified doctor should, if he intends to practise midwifery, spend a period in residence in a maternity hospital which will qualify him to sit for the diploma. He should try to get in touch with a maternity clinic and keep himself up to date by attending postgraduate courses.

In my opinion the present antenatal clinics should be staffed by doctors who are in active practice. The urge to undertake this work was not present when these centres were first started, but times have changed, and I am sure that there would be many applicants if they were thrown open.

When he takes charge of a case he should carry out scrupulously all the details of antenatal care he has been taught. He should see his patient monthly and test her urine and blood pressure regularly. The blood tests must be done and a careful watch kept on every detail. If the case is running a normal course there is no cause for worry and the head will settle down into position and all will be well. If there is any suspicion of a malpresentation or disproportion he will send her for a second opinion. Bleedings or toxæmia are always a definite indication for such an opinion.

When he gets the call in labour he will see his patient and may decide that all is well and that she is progressing favourably, or he may note foetal distress with incomplete dilatation of the os and should then telephone the hospital and discuss the case with someone on the staff. If she has bleeding or has lost blood ante- or post-partum, it is certainly a case for hospital if she is undelivered and for expert advice via the Flying Squad if her condition is causing alarm. The patient's home is not a suitable place for anything other than the simplest obstetrical procedures.

Constant Practice

There is a definite responsibility on a teaching centre to maintain the closest possible contact with its students after qualifying by means of postgraduate courses or by clinical assistantships, especially of a residential nature, or by societies. I am sure that it is not practicable for doctors to attend their own cases in a maternity hospital, especially if it is a teaching one. They should be given every possible facility to keep in touch with them during their stay in the hospital.

Constant practice is essential to retain confidence. The practitioner who is only an occasional obstetrician is a potential danger. I am sure that the habit of leaving so much of the antenatal care to a clinic is not sound. The doctor who sees his patient more frequently and is in constant touch is better fitted to recognize the signs that something is not quite right.

A very important point in the organization of a midwifery service would be solved if the component parts of it, the hospitals and consultants, the midwives and antenatal officers, and the general practitioners were under one authority or agreed body. At present the first group is under the R.H.B., the second is under the local health authority, and the third is under the executive council. An agreed body could well hold an inquiry into every maternal death.

Private enterprise, and latterly public funds, have produced a degree of order out of chaos in midwifery. It behoves the profession to equip itself worthily to fit in as the cornerstone of the composite structure.

The Corneal Grafting Act came into operation on September 26. It outlines arrangements by which a person may make available the use of his eyes after death for corneal grafting. It also allows a limited number of hospitals to remove eyes after death if they are sure there is no objection from any person concerned. The Act was discussed in an annotation in this *Journal* on July 12 (p. 83).