highest in young children. Two out of three patients were suffering from infection of the upper respiratory tract or trauma. It appeared that the distance the patient lived from the surgery played little part in his decision to seek medical advice urgently.

Eighty-six patients were responsible for about a quarter of all attendances, and 146 families for almost half of all urgent demands.

The measures proposed to be taken on the basis of these results are outlined.

We wish to record our thanks to Dr. E. D. Acheson, Director of the Oxford Record Linkage Study, for his helpful advice.

HOSPITAL TOPICS

Neasden Memorandum on Resuscitation

On 16 May 1966 a memorandum on resuscitation after respiratory failure and cardiac arrest was issued by the physician superintendent of Neasden Hospital to all medical officers and senior nursing staff. This stated that

"The following patients are not to be resuscitated:

- Very elderly, over 65 years.
- Malignant disease.
- Chronic chest disease.
- Chronic renal disease.
- Top of yellow treatment card to be marked N.T.B.R. (i.e., not to be resuscitated).

The following people should be resuscitated:

- Collapse as a result of diagnostic or therapeutic procedure—e.g., needle in pleura (even if over 65 years).
- Sudden unexpected collapse under 65 years—i.e., loss of consciousness, cessation of breathing, no carotid pulsation."

The existence of this memorandum was disclosed in the B.B.C. television programme 'Tomorrow's World', which was shown on 20 September. Subsequently it was discussed extensively both on television and in the national press.

Committee of Inquiry

On 22 September a statement was made by a committee set up by the North-west Metropolitan Regional Hospital Board to inquire into the circumstances in which the notice was issued. The members of this committee comprised Miss E. Richards, F.R.C.S. (vice-chairman of the board), Sir Charles Harlington, F.R.S. (member of the board), assisted by Drs. F. J. Fowler and Mr. G. H. Weston, respectively senior administrative medical officer and secretary of the board. The statement reads as follows:

"In considering the problem it is important to differentiate between emergency action to combat collapse or a sudden worsening in the condition of the patient which may occur for a variety of possible reasons in the course of an illness and action to remedy 'cardiac arrest' which sometimes occurs in a patient whose life is already in grave jeopardy due to a serious and irreversible complaint but may occur in the course of an illness from which recovery is possible. It should be understood that a patient whose heart stops beating dies unless cardiac action can be started again within at most three minutes, and that the instructions issued were concerned with attempts which must be made within seconds to restore life before the condition becomes irreversible and the patient dies. Action to remedy cardiac arrest can only be appropriately taken in certain cases and each individual case must be a medical decision.

"The Board is assured that no patient who might have benefited by resuscitative treatment during the currency of the notice failed to receive it.

"On the authority of the Vice-chairman of the Board (in the absence of the Chairman abroad) the Board has accepted the report and is acting upon its recommendations. A copy has been sent to the Minister of Health, who has informed the Board that he also accepts the report.

"The findings of fact of members of the Committee of Enquiry are as follows:

(1) That the idea of issuing instructions on the selection of patients for resuscitation arose from responsible discussion by medical staff in the Central Middlesex Hospital Management Committee Group and their decision that guidance to medical staff and in practice to nursing staff was necessary in the light of experience of wrong use of the resources available.

(2) That it was also agreed that medical staff in clinical charge of patients should mark case papers of patients who should not be resuscitated.

(3) That Dr. McMath, the physician superintendent, after seeing a film and hearing a talk on resuscitation given to the staff at Neasden Hospital, prepared the memorandum dated 16 May 1966 and circulated it within the hospital.

(4) That the Hospital Management Committee and the administrative staff were not involved in the decision to issue such a memorandum, in the composition of the memorandum, nor in the means of disseminating it."

The conclusions of the members of the Committee of Enquiry based on consideration of the evidence they elicited are as follows:

(a) That some guidance to medical staff on selection of patients is necessary to the proper use of resources and for the protection of some patients from distressing and unprofitable procedures.

(b) That age is one of the factors on which the decision on an individual patient may properly be taken, but that any guidance given should in no way imply that a patient should be excluded from consideration for resuscitation merely by reason of age or diagnostic classification.

(c) That the decision on each patient should be taken at the highest medical level available in the particular circumstances and should not be left to nursing staff.

(d) That if it is found necessary to mark case papers to denote whether a patient is considered a suitable subject for resuscitation, the guidance relating to the interpretation of any marking symbol adopted should not be displayed but should be communicated in confidence to staff who need to be aware of it.

(e) That guidance issued relating to the procedure to be adopted by nursing staff for summoning the resuscitation team in cases of cardiac arrest should be given separately from guidance given regarding interpretation of the marking system.

(f) That although Dr. McMath's initiative in attempting to formulate guidance for medical staff on the selection of patients for resuscitation is in itself to be commended we regard the wording of the memorandum issued over his signature as particularly unfortunate and we greatly deplore its distribution in a way which rendered it liable to public view, in which position it remained unchallenged over a considerable period.

(g) That we support the action taken by the Senior Administrative Medical Officer on
The conditions in which resuscitation measures for cardiac arrest should be applied are under review. Meanwhile, medical staff should know that they are to use their own judgement on individual cases to decide whether resuscitation is to be applied and they are not to be restricted merely by categories of age or diagnostic classification."

"(h) That we welcome action already taken to obtain information as to any procedure adopted in other hospitals in the region.

"(i) That we wish to emphasize that in this Enquiry we find grounds for criticism only in relation to the instruction given concerning the application of resuscitation procedures to patients presumed to be suffering from cardiac arrest. These procedures involve mouth-to-mouth breathing, speedy removal of the patient from the bed to the floor, and external cardiac massage, which are initiated by the nursing staff or any doctor available and are continued with the addition of other special procedures by the resuscitation team when it can arrive."

"We are satisfied that although cardiac resuscitation by these special methods will not be appropriate for some patients every treatment appropriate to each patient is given in cases of sudden deterioration within the resources available."

**Ministry Statement**

On 23 September the Ministry of Health announced that its chief medical officer had written to the chairmen of group medical advisory committees and medical advisory committees of teaching hospitals. This letter stated that the Minister had taken professional advice on this subject as a matter of urgency. This advice was that no patient should be excluded from consideration for resuscitation by reason of age or diagnostic classification alone, and without regard to all individual circumstances. Any form of general instruction was wholly unacceptable. The letter added that, as all doctors concerned knew, only a very small number of patients in hospital were affected by cardiac arrest in circumstances in which it would be possible to take measures which could be effective in reversing the process and restarting the action of the heart. Continuing, the letter stated that the nature of the decision to be taken was no different in principle from that required in other grave circumstances, and a decision to operate on a patient or to refrain from intervention might often be of similar importance. In such a situation the decision to attempt resuscitation must be the decision of the responsible doctor in each individual case. While age was a factor which might properly be taken into account, it was only one of many factors involved, and these must include in any individual case both the nature of the underlying disease and the doctor's assessment of the likelihood that any attempt to resuscitate would be successful.

The letter concluded by pointing out that these views had been formulated in consultation with the Minister's consultant advisers in medicine and his adviser in cardiology.

---

**CONFERENCES AND MEETINGS**

**Laboratory Screening Procedures**

"Laboratory screening procedures and their clinical implications" was the title of a joint symposium held at the Middlesex Hospital Medical School between the Association of Clinical Pathologists and the Clinical Section of the Royal Society of Medicine on 23 September.

From the chair Professor Sir Max Rosenheim, P.R.C.P. (London), asked whether the detection and treatment of all mild hypertensives would prevent cardiovascular complications in later life. This question at once exposed our ignorance of the natural history of disease, the importance of early diagnosis to the clinician, and the problems of manpower and cost of screening programmes. There was need for careful observation and clinical trial of such programmes before it could be decided whether they were worth while.

Professor L. G. Whitby (Edinburgh) was concerned with the screening of well populations—enquiries were extensive. Much work had been done in the United States, and indeed a Congressional committee had spent three days considering the subject. The Kaiser Permanente Foundation in California had a screening centre operated on production-line principles, which took three hours to perform a multitude of investigations, both biochemical and clinical (including sigmoidoscopy on those over 40), annually on its subscribers at a cost of $30 (£10). The Varmland Health Screening Project was a multiphasic programme offered once only to all those over 25 in the province of Varmland, in Sweden. In the latter, 75% of those invited had taken part; 12% were found to have abnormalities—4% known to the doctor, 5% unsuspected findings of diagnostic value, and 3% abnormalities for which there was no apparent explanation on further investigation, such as proteinuria.

Professor Whitby himself had been concerned with an investigation in Edinburgh, in which 12 biochemical analyses were performed on samples from 1,080 patients attending two general practices. This had allowed the findings to be considered in relation to what the doctors already knew about the patients. The main findings were the detection of some diabetics, some raised blood-urea levels, and some unexplained serum-bilirubin values between 1.1 and 1.7 mg./100 ml. But what had become apparent was that there were difficulties in calibrating the analysers used, and in standardizing the tests with regard to collection and handling of the specimens, and the time of day, venous stasis, diet, posture, and drug intake of the patient. Finally, there was the need to compare the results with previous readings on the same patient. Sophisticated record storage, retrieval systems, and statistical analyses were all essential if full use was to be made of the data derived from well-population screening.

**Hospital Studies**

Dr. T. P. Whitehead (Birmingham) was concerned with the investigations done on patients in hospital. A unit with 550 sq. ft. (49.5 sq. m.) of floor space had been built and equipped to carry out a screening programme of 16 biochemical determinations on about half the intake of inpatients to the Queen Elizabeth Hospital, Birmingham, at a cost of £15,000. The object of the survey was to see whether an initial battery of tests was of more value to the patient, or saved money by reducing bed-occupancy and transport of specimens, than tests done at the discretion of the doctors during the patient's stay in hospital.

A questionnaire had subsequently been sent to the clinician concerned asking in respect of each test whether it would have been requested—and, if abnormal, whether this would have been expected, whether it had led to a new diagnosis, or whether it had remained unexplained. Of 15,816 tests analysed, 1,203 had been abnormal, 114 had provided a new diagnosis, and 752 had remained unexplained. Data relating to bed-occupancy had not yet been evaluated. It was important, Dr. Whitehead concluded, to avoid seeking figures for figures' sake, and not to produce data on which no action would be taken.