

Obstetrics in the 1970's

When you come to think of it, there are several factors which will influence thought and practice in obstetrics in the next decade. These factors include the increasing sophistication of modern medicine; the publicity given to the more dramatic procedures; the dissemination of quasi-medical knowledge; new discoveries in all branches of our profession; modern drugs; the spread of medical care as a matter of right and justice and not of patronage and grace; the urge to get there first at all costs and the complexities of life in our society. In the 1970's, we may expect disease and disorders arising within ourselves more frequently than illnesses caused by bacterial invasion from without ourselves. Our diagnostic and therapeutic acumen will be taxed.

The pace of life and the satisfaction and satiation of appetite for all forms of pleasure will cause stresses and strains, tensions and hypertension, neuroses, nervous breakdowns, depression and insomnia. Sadly, psychiatric care could become a routine part of antenatal supervision. Things may well be better than we have described here, but appetite for all pleasures, especially in males must cause us seriously to think.

Modern Drugs

Modern drugs are potent and useful. They usually do what is asked of them, but the margin of error between the therapeutic dose and the one which causes reaction is small. Adverse reactions vary from harmless effects, such as dry mouth and sleepiness, to serious damage inflicted upon the liver and bone-marrow. Fortunately, grave reaction is rare except in the elderly, in patients with a history of allergy and in those who have taken potent drugs in the past.

Regretfully we must predict a substantial increase in liver disease over the next decade. This will be caused by the potent drugs which we have mentioned and which of course are usually prescribed in good faith for the relief and cure of disease. Liver cells prepare substances, including drugs, for excretion in the urine and faeces. This is done by enzymes which are present in the normal liver and which cause oxidation, reduction, hydrolysis and conjugation of foreign substances. It may have been damaged by previous disease. There is a limit to the detoxication which the liver can manage. Thus, it is that drugs taken over a long period of time, or in big doses or by sensitive or previously ill patients, can overtax and cause serious injury to the liver, shown by increase of the bilirubin load, disturbance in biliary excretion, interference with hepato-cellular metabolism or actual cell destruction. Drugs known to be harmful to the liver, under the above circumstances of overdosage, prolonged ingestion, hypersensitivity and previous disease, include sulphonamides and tetracyclines administered for infection; phenothiazine and chlorpromazine for vomiting; phenylbutazone for arthritis; phenacetin for pain; halothane for anaesthesia; steroids, including the contraceptive pill, for a multiplicity of conditions and diuretics. The signs and symptoms of damaged liver include nausea and vomiting, pyrexia, anaemia, diarrhoea, jaundice, neuro-psychiatric changes and coma. The pregnant woman, especially the under-nourished and toxæmic one, is particularly sensitive to the liver-toxic effect of drugs. Renal disease may aggravate the effect of drugs.

Recession of Certain Complications

To turn, for a moment, to a

more cheerful picture, we can look forward in the 1970's to the continued and progressive recession of certain complications such as obstructed labour, threatened rupture of the uterus, uterine inertia, failure of forceps delivery, impacted face and breech presentations, exsanguination, including by accidental haemorrhage, and so on.

The stature of women has increased. Disproportion will be rare, unless the size of babies will catch up with the pelvis. We must, however, continue to detect unstable lie because some of its causes including placenta praevia and lax abdominal muscles will always remain with us. Oxytocin and Caesarean Section have eliminated long labour as a cause of foetal death. Modern anaesthesia, blood transfusion and antibiotics have

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made Caesarean Section safe, with a maternal mortality of no more than 2 per thousand. New work on hypertension indicates that there may be no such condition as "essential" hypertension.

Recession and emergence are almost complementary activities. We must expect the emergence of complications, mainly of a medical nature, in contradistinction to the receding obstetrical ones which we have mentioned. In the recent past, we have had incomprehensible blind spots relating to anaemia, disturbed carbohydrate metabolism and urinary tract infection. Anaemia can be eliminated in the 70's. Twenty per cent of the patients in our hospitals show one or more of the eleven O'Sullivan/Drury postulates.

For your information the eleven O'Sullivan/Drury postulates are: family history of Diabetes Mellitus; obesity; glycosuria; more than 7 babies already; unexplained neo-natal death; hydramnios; foetal defor-

mity ; repeated prematurity ; babies which are large for the period of gestation and recurrent toxæmia. Seven per cent of all pregnant women show before 28 weeks a heavy bacterial infection (E. Coli) of the urine without symptoms. Some of these infections clear up with sulphas, nitrofurantoin or ampicillin or with two or all three of them. Some clear up temporarily to recur later in pregnancy or after delivery. Still others persist despite treatment. But, no matter what happens, all these women (7% of the total) should have an excretion urogram performed upon them 4 to 6 months after delivery because one-third of them, or about 2% of all pregnant women, will show or will have developed serious or potentially serious lesions of the urinary tract.

Outbreaks of Infection

Continuing with the emergence of complications in the 70's, we have to emphasize that unless the development of new drugs will keep pace with the growing resistance of pathogenic microbes, we may expect isolated cases or outbreaks of serious and even fatal infection. Of course, as of now, puerperal sepsis has to a great extent been overcome by minimization of trauma, by adherence to the principles of asepsis and anti-sepsis, by blood transfusion, by improved nutrition in the mothers and by new drugs, but we do feel that beginning about 40 years ago, before the introduction of sulphas and antibiotics, pathogenic microbes had started to lose a measure of their pathogenicity.

The reference to puerperal infection reminds us of another important complication, pulmonary embolism. We can look forward to a reduction in the incidence of this frightening complication in the 70's, both as a cause of death and of serious illness. Optimism is justifiable on account of new developments in the supportive, sclerosing and surgical treatment of varicose veins ; on account of minimal trauma in obstetrical and surgical operations ; on account of the correction of anaemia ; on account of early rising and of

postpartum and post-operative exercises, on account of early diagnosis of embolism in its building-up phase and on account of anti-coagulant and enzymatic treatment. We may expect more frequent surgical treatment for the "high bad" vein. Physicians teach us to regard with suspicion after delivery and operation such symptoms and signs as low-grade pyrexia, tachycardia ; dyspnoea, undue weakness, respiratory lag and so on and to adopt controlled anticoagulant therapy there and then. Lectures on pulmonary embolism "build-up" should be given regularly to our doctors, students and nurses.

The Baby

Let us switch from the mother to the baby. There is some truth in the statement that the most dangerous road of all is that through the birth canal. Forty years ago, 6 mothers died for every thousand deliveries. Nowadays the mortality is 0.25 per thousand. A common occurrence in our hospital is the admission of the patient with spontaneously ruptured membranes at 27/28 weeks. She is rested in bed and given a course of antibiotics. She continues on until 32/33 weeks when a small apnoeic foetus, weighing about 3 lbs., and suffering from the effects of placental infection, is born. The baby is liable to die in the neonatal period and, if he does survive, the chances are about 1 in 2 that his mental development will be retarded. The discovery of P.K.U. was an important achievement in that it represented the first break-through in the association of mental retardation with biochemical error.

Personnel

Turning to personnel ; in the 1970's, we would like to see our nurses working under good and happy conditions of remuneration, accommodation, nutrition, sickness insurance, pension schemes, facilities for amusement, vacation, staff relations, education, refresher courses and even marriage guidance. Happy nurses make good nurses and this should be the

key-note of the administrative authorities. We would like to see a sense of humanitarianism in antenatal care, whereby each patient will be treated with kindness and the personal touch, and not as a piece of goods on a continuous chain, on which she enters by one portal, has several examinations carried out at successive stations and leaves by another door. The same spirit of humanity should be carried into the labour suites and puerperal wards. The development of an active academic spirit is also essential. The medical and nursing staff should join in clinical research.

We would like to see improved facilities for the amusement and occupation of those patients who are not ill enough to require active medical and nursing treatment, but who for one reason or another must remain in hospital. We encounter these cases in toxæmia, hypertension, high parity, multiple pregnancy, anaemia, compensated heart disease, unstable lie, mild antepartum haemorrhage, social problems and so on.

Despite increasing affluence it is so expensive to be sick or to have a baby nowadays that only the rich and the poor minority can afford either luxury. We must hope, therefore, for an extension of Voluntary Health Insurance to include maternity.

Personal Message

Strive for quality rather than quantity in antenatal care. Seal off the loop-holes of error in this important branch of preventive medicine because they are many and big. Keep the human touch, for which nurses are justly praised. Review minimal requirements in antenatal care as new knowledge is required. Complications of pregnancy usually present themselves on a broad and identifiable front, but try to see behind the complications as they present themselves to your senses. In your work, give special care to the grand multipara.

So far as minimal maternal mortality, declining foetal loss and

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