

femoral head taken at the time of internal fixation yielded the interesting result that if the specific gravity of the biopsy specimen was below 1.35 internal fixation ended either in non-union or collapse of the femoral head.³

Determination of the specific gravity of femoral head biopsy specimens is time consuming and only of retrospective value, but it is hoped that in the near future it will be possible to estimate the degree of mineralization of a femur or lumbar vertebra by feeding the video signal produced by the television camera of an image intensifier into the deflection plates of a suitable oscilloscope. Preliminary unpublished work performed by myself and by Marconi has shown that the method is feasible and the results are reproducible and reasonably accurate. This method should make it possible to divide the cases into two groups: (a) Those with well-mineralized femoral heads suitable for pinning; (b) those with poorly mineralized femoral heads suitable only for prosthetic replacement.

Finally, it is worth mentioning that some patients who are unfit for operative treatment do quite well if they are mobilized in spite of their fracture. The femoral neck becomes rubbed away and the end result is a Girdlestone's operation.—I am, etc.,

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Mortality among Widowers

SIR,—In their report relating the increased mortality of elderly widowers with cardiovascular disease, Dr. C. Murray Parkes and others (22 March, p. 740) suggest that research is needed to discover whether widows and widowers under 55 are similarly at risk. A paper by Kraus and Lilienfeld,¹ based on the 1950 census and upon all deaths in the continental United States during the years 1949–51, provides much of the information needed.

Kraus and Lilienfeld report that an outstanding feature of the data from the National Office of Vital Statistics is the great relative increase in mortality among young widowed people compared with married people. In the age group 20–34, they find that the annual death rate of widowed people is over twice that recorded for married people of either sex, and this increase in mortality applies to both white and non-white people. The highest ratio (average annual widowed person death rate/average annual married person death rate, by age) is for the white male in the 25–34 age group with a ratio of 4.31. In each of the four colour-sex groups the ratios decrease steadily with increasing age, but remain consistently greater than unity in all groups, the lowest being for the age group 70–74. The ratios for widowers also remain consistently higher than for widows in all age groups.

Details of the causes of death are given only for the age groups 20–44. A substantial increase in the suicide rate is

recorded for young widowers but not for widows. The suicide ratio for widowers aged 20–24 is 9.3; for those aged 25–34 it is 6.9, falling to 3.5 by the age of 35–44. The increase in mortality ascribable to accidents is relatively small with a highest ratio of 4.4 for widows aged 20–24, falling to 2.8 by the age 35–44. The highest recorded increase in mortality is for tuberculosis, vascular lesions of the central nervous system, arteriosclerotic heart disease, non-rheumatic chronic endocarditis and other myocardial degeneration, hypertension with heart disease, and general arteriosclerosis.

The overall mortality for each of these diseases is at least four times greater for the widowed than the married. Some of the ratios exceed 10. The mortality from vascular lesions of the central nervous system among widowers aged 20–24 is 11.7 times greater than for married men. Widows aged 20–24 have a ratio of 14.4 for arteriosclerotic disease, 11.3 for non-rheumatic chronic endocarditis and other myocardial degeneration, and 18.4 for hypertension with heart disease. Widowers aged 25–34 have ratios of 12.7 for non-rheumatic chronic endocarditis and other myocardial degeneration and 10.8 for hypertension with heart disease.

It seems that the increase in mortality associated with widowhood among the younger age groups is largely attributable to diseases of the cardiovascular system. Numerically these deaths among young widowed people are far from insignificant. In the U.S.A. out of a population of 233,000 widowed people below the age of 35 an average of 1,105 die each year. As the increase in risk for young widowers is twice that of young widows the annual death rate for young widowers in the U.S.A. is about 1%.—I am, etc.,

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Active Labour

SIR,—We were most interested in the paper by Mr. Kieran O'Driscoll and others from the National Maternity Hospital, Dublin (24 May, p. 477), and would like to compliment them on the results achieved by an active policy in the management of labour in primigravidae. We would heartily endorse such a policy, and have advocated and utilized intravenous oxytocin both to induce and accelerate labour since 1963.^{1,2} We have always stressed that the contractile response of the uterus is much more important

than the amount of oxytocin administered. Although we agree with most of the comments made by Mr. O'Driscoll and others, we should like to take issue with them on a few points.

Firstly, they state that they wish to "reject the popular fallacy" that "prolonged labour is often an expression of cephalo-pelvic disproportion." We believe that dysfunction may in some cases represent the response of the uterus to disproportion, and, although agreeing that efficient uterine action can be stimulated by the judicious use of oxytocin in these circumstances, this may not always be safe for the foetus. We have reported³ three foetal deaths from cerebral haemorrhage, apparently caused by strong uterine contractions, stimulated by oxytocin, forcing the foetal head through a pelvis which subsequently proved radiologically to be smaller than clinical assessment in labour had suggested. These deaths occurred early in 1964, and since then we have emphasized the hazards of intravenous oxytocin in the presence of cephalo-pelvic disproportion.

Secondly, they perhaps rightly comment that since prolonged labour is uncommon in multiparae its incidence should be reported for primigravidae only, and point out that we did not distinguish between the two in a previous publication.² In a subsequent article,³ however, we analysed results in primigravidae in Aberdeen since 1938, with particular reference to the effect of the more liberal and rational use of oxytocin which we introduced in 1963 to induce and accelerate labour. Details were given of length of labour, method of delivery, and caesarean section rates in about 2,500 primigravidae delivered between 1964 and 1966. A major degree of cephalo-pelvic disproportion was the most common indication for caesarean section in these primigravidae, the diagnosis being confirmed in most cases by full radiological assessment postpartum. This may be the main reason for the higher overall incidence of caesarean section in Aberdeen primigravidae in 1964–6 (5.4%), compared to those in the Dublin series (4%).

We would not wish, however, to detract from the importance of the publication from Dublin nor from the interest that it must stimulate. We hope that many more centres will adopt such an active policy.—We are, etc.,

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Future of Consultants

SIR,—The report of the working party on the responsibilities of the consultant grade (7 June, p. 588)¹ raises important issues for peripheral hospitals, which will surely bear the main brunt of the working party's recommendations. The report opposes the estab-

lishment of two grades of consultant, but by actively encouraging mobility within the consultant grade (a mobility which can only be in one direction) it may bring about just such a division. The suggestion implicit in the report, that a candidate may apply for con-