The 125 patients comprised 89 women and 36 men aged 75 to 100 years (mean 82·7 (SD 4·8)). After their acute admission 86 patients (69%) were discharged home (group 1) and 39 (31%) transferred to a long stay hospital (group 2). The table compares the two groups. Among the 15 positive opinions recorded in group 2, six were concordant between patient and family and nine were discordant; eight positive responses were expressed by the family alone and one by the patient alone. In group 2 nine patients had no relatives near by; all gave a negative opinion. Thus 15 of the 21 positive opinions (71·4%) concerned patients in group 2. There was no relation between opinion and age. In multivariate analysis the difference was mainly explained by the opinion and length of the acute hospital stay.

Distribution of possible predictive factors of outcome in the two groups of patients. Except where stated otherwise figures are numbers (percentages) of patients

	Group 1: patients discharged home (n=86)	Group 2: patients discharged to long term care (n=39)	p Value
Age in years:			
75-79	31 (36·1)	8 (20·5)	NS
80-84	29 (33·7)	16 (41·0)	
≥85	26 (30·2)	15 (38·5)	
Sex:			
Women	66 (76·7)	23 (59·0)	p<0·05
Men	20 (23·3)	16 (41·0)	
Duration of illness before admission:			
<1 month	71 (82·6)	30 (76·9)	NS
≥1 month	15 (17·4)	9 (23·1)	
Mental impairment (Pfeiffer scale):			
None	54 (62·8)	18 (46·2)	NS
Mild	13 (15·1)	11 (28·2)	
Moderate	7 (8·1)	5 (12·8)	
Severe	12 (14·0)	5 (12·8)	
Opinion about transfer to long term care*:			
Positive	6 (7·0)	15 (38·5)	p<0·001
Negative	80 (93·0)	24 (61·5)	
Mean [SD] length of stay in acute ward (days)	15·5 [11·2]	24·2 [12·2]	p<0·001

*Opinion expressed by patient or family, or both.

Comment

Deciding early adequate discharge plans for elderly patients admitted for acute care is a real challenge in the emergency department, since acute illness may render these patients dependent and thus prolong their stay in acute care units. We recorded an average stay of nine days longer among the elderly group subsequently transferred to long term care.

When an acute health problem occurs in an elderly person immediate admission to hospital is often the only solution for the patient and his family. Though a large number of elderly already benefit from supportive social services, these services are overwhelmed at the time of hospitalisation. Thus discharge to care by the family or to a long term care unit until possible recovery of an autonomous state or availability of intermediate care facilities are the only alternatives.

In contrast with other reports,[1-3] we did not find that great age, female sex, and altered mental state were contributory factors in the subsequent disposal of these patients. Family opinion was the only predictive factor, unrelated to the age or mental state of the patient. Hence we consider that family support was the most important factor determining patient outcome and suggest that this should be taken into account for early social assessment of the elderly.

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Recent trends in mortality from and incidence of myocardial infarction in Stockholm

Mortality from ischaemic heart disease increased in Sweden, in contrast to many other Western countries, during the 1970s,[1] and studies in Stockholm and Gothenburg have shown that mortality from and incidence of myocardial infarction rose during this period among middle aged men.[2,3] Recently, however, statistics have shown a decline in mortality from myocardial infarction.

Estimates of the incidence of myocardial infarction may be obtained for Stockholm county by combining information from a register of all discharges of hospital inpatients with information from the national cause of death register.[4] We report on mortality from and incidence of myocardial infarction during 1974-84 among men aged 30-64 and women aged 40-64 in Stockholm county.

Subjects, methods, and results

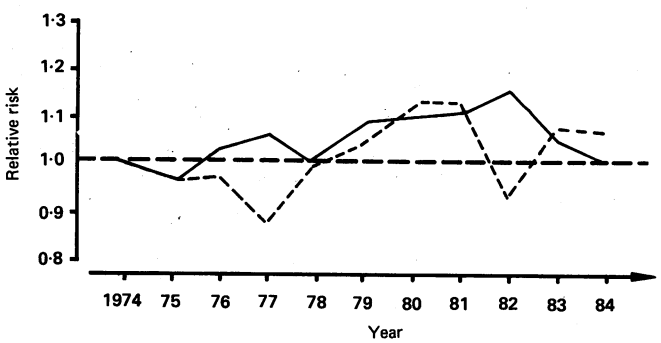
All deaths in Sweden are recorded in the national cause of death register. From this register we selected all those with myocardial infarction (International Classification of Diseases (ICD), 8th revision, code 410) as the underlying or contributory cause of death among residents in Stockholm aged 30-64 during 1974-84 (4910 deaths). A register of discharges of hospital inpatients has been kept for Stockholm county since 1969 and covers almost all discharges in the county. From this register we selected all those discharged with a diagnosis of myocardial infarction (ICD Swedish revision, codes 410.00 and 410.99) recorded during 1974-84.

The Swedish personal identification number was used to link the records. Because of inaccurate or incomplete identification numbers 110 patients (0·7%) were excluded. New cases of myocardial infarction were identified by combining information from the two registers with criteria previously described (15 753 cases 30-64 years of age).[2,4] The mean yearly population was used to estimate the number of person years at risk.

The maximum likelihood estimates of mortality and incidence for each year, related to the baseline year (1974), were calculated by a multiplicative model.[5] Mean yearly changes in mortality and incidence were estimated similarly and are given below with 95% confidence intervals.

The estimated mean change in mortality during 1974-84 was 0·8% (0·2% to 1·3%) for men and −0·7% (−2·7% to 1·4%) for women. The mean yearly decline among men during 1982-4 was −13·0% (−19·1% to −6·4%). No corresponding change was observed for women.

The figure shows the incidence of myocardial infarction during 1974-84. The mean yearly percentage change during 1974-84 was estimated to be 0·7% (0·2% to 1·3%) for men and 1·1% (−0·1% to 2·3%) for women. The mean yearly decrease among men during 1982-4 was −6·6% (−10·3% to −2·7%). The mean yearly decrease in incidence among women during 1980-4 was −1·6% (−5·3% to 2·2%).



Incidence of myocardial infarction in Stockholm 1974-84 among men aged 30-64 (——) and women aged 40-64 (- - - -).

Comment

Small changes in mortality from and incidence of myocardial infarction were observed among middle aged men and women in Stockholm during 1974-84. Among men, however, a rise during 1974-82 was followed by a decline during 1982-4. This decline may reflect a real change in the incidence of myocardial infarction but might have other explanations. Incidence in this study means the incidence of cases diagnosed by the medical services. A decrease in the patients' inclination to seek medical care for symptoms related to myocardial infarction would, for example, tend to be associated with a decline in observed incidence. Such a decrease, however, could not explain a decline in mortality. Furthermore, shifts in diagnostic practice or changes in the accuracy of the medical information systems used might have

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influenced the estimates of changes in incidence and mortality, although the systems used operated in the same way throughout the years studied.

The decline in incidence of myocardial infarction among men was seen over only two years, and it is too early to draw conclusions regarding the long term trend. If the decline continues, however, possible explanations should be investigated. Future data may indicate a turning point in the mortality from myocardial infarction in Stockholm and Sweden in general.

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HIV infection and AIDS in newborn babies of mothers positive for HIV antibody

Two thirds of the reported cases of the acquired immune deficiency syndrome (AIDS) in children have no risk factor except a mother belonging to a group with an increased prevalence of infection with human immunodeficiency virus (HIV).[1] There is evidence of transplacental passage of the virus during early and late gestation,[2 3] but the incidence of fetal and neonatal infection in newborn babies of seropositive mothers has not yet been determined. We present the clinical and serological outcome of 24 babies aged 6 months born to mothers who were drug addicts and positive for HIV antibodies.

Patients, methods, and results

In 1985, 31 pregnant intravenous drug abusers at the Center for Pregnant Drug Addicts of Milano, Italy, were identified as being positive for HIV antibodies by enzyme linked immunosorbent assay and Western blot analysis at the first obstetrical visit and confirmed again before delivery. All patients were followed up and delivered at this department.

All the women were clinically well except for one, who had generalised lymphadenopathy, fewer than 400 T4 lymphocytes/mm^3, and a low T4/T8 lymphocyte ratio. Nine women were primigravidas; 15 were secundigravidas, but only three were parous, reflecting a high incidence of elective abortions. All the pregnancies were singleton, 18 women being delivered vaginally and six by caesarean section (two babies in breech position, four suffering from intrapartum distress). All the babies were in good condition at birth with no malformations. The prevalence of premature delivery, fetal growth retardation, and early neonatal disease was comparable to that in the pregnant seronegative drug addicts. None of the babies was breast fed.

We obtained informed consent from the parents to follow up their babies. Clinical evaluations were performed at intervals of one month, and serological screening (enzyme linked immunosorbent assay and white blood cell count) and counts of T4 and T8 lymphocytes were performed on cord blood and at intervals of three months. At 6 months 12 babies were seropositive and 12 seronegative (table). One seropositive baby died of *Pneumocystis carinii* pneumonia at 4 months, and one seropositive baby was diagnosed as suffering from AIDS related complex at the age of 3 months. All the other babies thrived, the results of their follow up being entirely normal.

Serological state of 24 babies at 6 months born to intravenous drug addicts positive for HIV antibody

Delivery	No of babies	Seropositive	Seronegative
Vaginal	18	9*	9
Caesarean	6	3	3
Total	24	12	12

*Died at 4 months from *Pneumocystis carinii* pneumonia.

Comment

Our limited study shows that the prevalence of seropositivity in children aged 6 months, when all the maternal antibodies should have disappeared, is 50%. Caesarean section does not seem to protect the fetus from infection, as has been suggested by one author and later refuted by the Center for Disease Control.[4] This is consistent with the discovery of the virus in the fetal compartment in cases of elective caesarean section at 20 and 36 weeks.[2 3]

The two cases of immune deficiency acquired by maternal transmission of the virus indicate that early morbidity and mortality are a severe problem, but their incidence seems to be restricted to about 10% of the offspring. Unfortunately, nothing can yet be said about long term morbidity and mortality. These data may be helpful in counselling seropositive women before or in early gestation, as they suggest that the risk of fetal infection and severe postnatal morbidity is high. Unfavourable perinatal outcome, usually associated with drug addiction, was similar in seropositive and seronegative women: a detrimental effect of the virus in this regard was thus not evident.

Constant updating of available data will allow better counselling, more appropriate obstetrical care, prenatal diagnosis, and prompt treatment when effective treatment is available.

The Center for Pregnant Drug Addicts of Milano comprises Carmen Brescianini, Anna Bucceri, Anna Canestrari, Gabriele Ferraris, Isa Lodi, and Marina Ravizza.

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Fall in intraocular pressure during acute hypoglycaemia in patients with insulin dependent diabetes

In early studies of insulin induced hypoglycaemia in diabetic patients the development of "intraocular hypotonia" was noted[1]; the occurrence of a sudden decrease in intraocular pressure during severe, uncontrolled hypoglycaemia was later confirmed in five patients with insulin dependent diabetes of varying duration.[2] To examine the magnitude of this decrease and its temporal relation to autonomic activation we measured intraocular pressure during controlled insulin induced hypoglycaemia in a group of insulin dependent diabetics.

Patients, methods, and results

As part of their diabetic education we exposed 12 insulin dependent diabetic patients aged 20-38 to a controlled episode of insulin induced hypoglycaemia with their informed consent. All patients were studied within one month after the diagnosis of diabetes; none had had metabolic decompensation at presentation. Satisfactory glycaemic control was established with a combination of short and intermediate acting human insulins given twice daily. None of the patients had diabetic retinopathy or had experienced blurring of vision after starting insulin treatment. Standard tests of cardiovascular reflexes gave normal results.

The patients were studied supine after an overnight fast, soluble human insulin

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