are no longer left to chance, but are to be decided in a rational manner. In practice, to be sure, this family planning has been unable to attain perfection. There are gaps between wish and reality. Responsible married couples with a desire for children are concerned that to bring up children means an alternative life, that is, frugality as opposed to a demanding consumer society that would like to fulfill every material need and that is involved in the egocentric search for self-realization. A modern system of family politics must offer not only much help, as for example working hours that fit in with the family, money for upbringing, money for children, sufficient living and playing space; but also must guarantee security for the future. Here there is a new task of family planning advice by the physician, who must develop and reveal a healthy optimism, must impart hope of being able to refunction the no-way-out of the no-future generation into an attitude that affirms life.

PREVENTION OF PRE-ECLAMPSIA BY EARLY ANTIPLATELET THERAPY

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Summary: A woman who had lost two babies, each pregnancy being complicated by eclampsia, and one pregnancy resulting in renal failure; was treated in her fourth pregnancy with heparin and dipyramidole from early pregnancy. A successful outcome of this pregnancy is reported.

CASE REPORTS

Mrs M.L.B. embarked upon her first pregnancy whe she was aged 23. She was managed in another hospital and was admitted when 28 weeks pregnant having had an eclamptic fit at home. Her blood pressure at the time was 190/140 with marked proteinuria. Labour was induced and she delivered a male stillborn infant weighing 1131 grams. Six weeks later her blood pressure was found to be 120/70 and her urine was normal.

Pregnancy 2 She had a 12 week spontaneous abortion.

Pregnancy 3 She was seen at 13 weeks with a normal blood pressure of 120/70. Having been seen regularly her blood pressure suddenly rose to 150/95 when she was 26 weeks pregnant. Clinically the fetus appeared to be only 20 weeks size. Her urine contained abundant protein. She was immediately admitted to hospital, sedated and given antihypertensives. In spite of intensive treatment, she developed a pain in her chest and back and complained of feeling unwell. After 4 days in hospital at 27 weeks of pregnancy she had an eclamptic fit which was treated with heavy sedation and induction of labour with a Drew-Smythe catheter and oxytocin (Syntocinon). She had no more fits and delivered a stillbirth female fetus some 5 hours later which weighed 450 G. During the next two days her production of urine gradually fell to a level of 60 ml in 24 hours. Her serum creatinine and potassium were rising alarmingly so she was transferred to another hospital for dialysis. She made a slow recovery and renal biopsy showed increased cellularity of the glomeruli consistent with the endothelial cell proliferation of pre-eclampsia. She was seen 8 weeks after delivery and found to have a blood pressure of 130/80 with normal urine.

Pregnancy 4 Nine months later she embarked on yet another pregnancy and when six weeks pregnant was admitted to hospital. Her blood

pressure at that time was 120/70. All other investigations including haemoglobin, electrolytes, human placental lactogen and fibrin degradation products were then normal, as were urinary oestrogen estimations done later in pregnancy. All haemotological and biochemical estimations were repeated twice weekly. She was rested for five days each week and allowed home at the weekends. At fifteen weeks since her last menstrual period she was started on dipyramidole tablets 100 mg thrice daily and subcutaneous heparin which was given initially intravenously and later intramuscularly to maintain a plasma heparin level of between 0.76 and 1.06 Units per ml.

By 19 weeks of pregnancy she was allowed home on this regime and remained at home taking the dipyramidole 300 mg daily and giving her own subcutaneous heparin. Weekly plasma heparin levels were done.

She went into spontaneous labour at 31½ weeks and produced a live girl weighing 1905 grams which thrives. At no time during the whole of this albeit truncated pregnancy did her blood pressure rise above 110/70 and her urine always remained normal. During the pregnancy twice weekly urea, uric acid, human placental lactogen and total urinary oestrogen levels were at all times within the normal range. It is important to note that all four pregnancies were with the same husband.

DISCUSSION

It was Bonner *et al.* ([1]) who first suggested that the treatment of fetal growth retardation in utero could be treated with a combination of heparin and dipyramidole. This treatment was based on the theory that pregnancy induced hypertension is associated with placental occlusive vascular lesions caused by deposition of fibrin and platelets. More recently, Wallenburg and co-workers ([2]) have shown that it is possible to reduce the incidences of pregnancy induced hypertension using low dose aspirin in a placebo controlled trial.

Similarly Capetta (1986) and colleagues have shown improved fetal salvage in placental insufficiency and those at risk of developing hypertension of pregnancy using heparin and dipyramidole. In their series of 13 treated cases all the infants survived and only 2 of these had mothers who developed late pregnancy hypertension.

Our patient is the only one that we can find after studying the literature, in which a woman had two previous babes lost in association with eclampsia, the second pregnancy being followed by renal failure, and then a subsequent pregnancy in which treatment with heparin and dipyramidole from 15 weeks of pregnancy seemed to prevent a further pregnancy loss.

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