

A SUCCESSFUL PREGNANCY IN A PATIENT WITH A SOLITARY KIDNEY

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SUMMARY

A 24-year old woman, AM, with a tuberculous right kidney was treated with right nephrectomy and anti-tuberculous drugs including rifampicin. Irregular periods 18 months after nephrectomy prompted investigations including diagnostic dilatation and curettage (in the second half of her cycle) which yielded normal secretory endometrium. Six months later, i.e., 2 years after the nephrectomy she presented with an 8-weeks intrauterine pregnancy. Investigations revealed that she was in good health: blood urea and creatinine were normal at 4m.moles and 86 micromoles per litre respectively. She received regular ante-natal care and all parameters remained normal. At 36 weeks she was admitted for closer monitoring and at 38 weeks a 3kg female live baby was delivered by caesarean section. The post-operative period was uneventful and she was discharged home on the tenth post-operative day. The patient has subsequently remained healthy and presented with a second pregnancy 2 years after the above delivery.

INTRODUCTION

The view on the management of pregnancy in women with renal disease has changed markedly. In the past such women were advised not to get pregnant and some of those who got pregnant were advised to undergo therapeutic abortion followed by sterilisation.

Today most pregnancies in such women are successful provided renal impairment and/or hypertension

are minimal. Below is a case of a successful pregnancy in a woman with a solitary kidney.

A 24 year-old woman, AM, had right nephrectomy done in October 1989. The indication for the operation was renal tuberculosis. She was put on Rifampicin and the red tablet (a combination of isonicotinic acid and thiacetazone) for one year.

In May 1991, she was referred to the Gynaecology Department with a complaint of irregular periods and secondary infertility. Her only pregnancy had ended in a spontaneous abortion at 13 weeks in 1987.

Her general condition was satisfactory on examination. Her blood pressure was 110/80 mmHg. No abnormality was detected in the cardiovascular and respiratory systems. The only positive finding on abdominal examination was a scar from the incision made for the nephrectomy. The pelvic organs were normal. The haemoglobin was 12.0gm/dl and the sickling test was negative. She was investigated for infertility. Among the investigations done was a diagnostic dilation and curettage in the second half of her cycle and this yielded secretory endometrium. The pathologist's histological report made no mention of tuberculous endometritis.

In September 1991 she gave a history of amenorrhoea. Her last menstrual period had been in July 1991. Pelvic examination showed a bulky uterus about eight weeks size and ultrasonic examination confirmed an intra-uterine pregnancy with a gesta-

tional age of eight weeks and put the expected date of delivery at 22/4/92. The blood urea was 4.0mmol/L (Normal values for Korle-Bu: 3-6 mmol/L) and the serum creatinine was 86 micromole/L (Normal value for Korle-Bu -60-120micromole/L). She had no proteinuria and no glycosuria. She attended the antenatal clinic regularly. At 36+weeks, the serum creatinine went up to 110 micromole/L and she was admitted to hospital for monitoring. Fetal growth as monitored by abdominal examination and fetal well-being as monitored by fetal kick counts remained satisfactory while she was on admission and she remained in good health.

A week after admission when she was at 37+ weeks, ultrasonic examination put the gestational age at 34 weeks. The liquor volume was reported as adequate. Her blood pressure remained normal and the serum creatinine was 76 micromole/L. The blood urea was 4.7mmol/L. The haemoglobin was 10.8gm/dl.

She was delivered by caesarean section at 38 weeks. The indication for the operation was renal disease at 38 weeks with evidence of IUGR and unfavourable cervix. The baby was a female weighing 3.0 kilograms and in a satisfactory condition. Post operatively she remained well and was discharged home on the 10th post-operative day. She attended the postnatal clinic six weeks after delivery. She was well and had no complaints. She had not resumed menstruation and she was breastfeeding.

Her general condition was satisfactory on examination. She was not anaemic. Her blood pressure was 110/70 mmHg. The chest and heart were normal. The abdomen was soft and not tender and no abnormality was detected on vaginal examination. The haemoglobin was 10.2 mg/dl, and the blood urea was 4.0mmol/L and the serum creatinine was 80 micromole/litre. The baby was well, and weighed 4.1kg.

DISCUSSION

A case of a successful pregnancy in a young woman

with a solitary kidney has been described. The patient had had right nephrectomy done because of unilateral renal tuberculosis and she had been on antituberculous drugs for at least a year. Some patients with a solitary kidney have either a congenital absence of one kidney, or marked unilateral hypoplasia. Most however, have had a previous nephrectomy because of pyelonephritis with abscess, hydronephrosis, unilateral tuberculosis, congenital abnormalities or tumour¹. If renal function is normal and stable in such patients as in the case of AM, pregnancy may be considered, for all such women seem to tolerate pregnancy well and there is no difference if the right or left kidney remains as long as it is located in the normal anatomical position².

The antenatal management of AM included careful monitoring of her blood pressure which remained normal, assessment of her renal function by estimation of blood urea and serum creatinine, Urinalysis and assessment of fetal growth and fetal well-being.

De Swiet³ recommends assessment of renal function by 24-hour creatinine clearance and protein excretion.

She was admitted at 36+ weeks when the serum creatinine was elevated, and even though the value was within the normal range, it was thought there had been, a deterioration of her renal function. Other indications for hospital admission in such cases are the development of hypertension, signs of intrauterine growth retardation, changes in the rate of weight gain and symptoms of impending eclampsia.

It is advisable to deliver patients with renal disease at 38 weeks if pregnancy proceeds satisfactorily, because prolonging the pregnancy beyond this time can be associated with a greater risk of placental failure and intrauterine death. Moreover, at this gestation, the fetus should be relatively free of risks if the expected date of delivery is correct³.

Delivery before 38 weeks may be necessary if renal function deteriorates and if signs of impending in-

trauterine death develop. Vaginal delivery is not contraindicated. AM was delivered by caesarean section because her cervix was not favourable for induction of labour.

The preoperative period was uneventful and she was discharged home on the 10th post operative day.

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