By comparative study of sequential biopsies we shall try to answer the question if and to what extent the morphological aspects of intravascular coagulation change with time.

**Intravascular Coagulation and Pregnancy**

**Johan Bonnar** (Department of Obstetrics, Radcliffe Infirmary, Oxford) Extensive changes occur in the coagulation and fibrinolytic systems during pregnancy, particularly in the third trimester. The concentration of plasma fibrinogen, factor VIII, factors VII and X substantially increases and plasma fibrinolytic activity markedly decreases. During childbirth changes in keeping with activation of the clotting mechanism take place and fibrinolytic activity returns to normal after delivery of the placenta. The changes in the haemostatic systems in pregnancy may be a physiological development to preserve the integrity of the maternal and fetal circulations during pregnancy and to facilitate haemostasis in the uterus during and after separation of the placenta. These alterations also establish a vulnerable state for intravascular coagulation.

In conditions such as abruptio placenta and amniotic fluid embolism massive intravascular coagulation can develop leading to defective haemostasis and release of large amounts of fibrin degradation products into the circulation.

A low-grade process of intravascular coagulation also occurs in pre-eclampsia. The disturbance of the balance between clotting and fibrinolysis in pre-eclampsia seems to be localized to certain areas of the vascular tree, particularly the uterus and kidney. Thrombotic occlusion appears to contribute to the impairment of placent al blood flow and the development of placental infarction and ischaemia which occur in pre-eclampsia and in pregnancies complicated by impaired fetal growth. In pregnancies complicated by severe placental insufficiency treatment with heparin and dipyridamole improved placental function and fetal growth.

Further knowledge of the physiology and pathology of the coagulation and fibrinolytic systems may open up a new field of rational treatment for several of the hazards inherent in pregnancy.

**Mycoplasmas and Human Infertility?**

J. DE LOUVIS, M. BLADES, R. HARRISON, ROSALINDE HURLEY, AND VALERIE A. STANLEY (Queen Charlotte's Maternity Hospital, London) There have been reports that eradication of T-strain mycoplasmas by appropriate antibiotics has been followed by pregnancy in couples adjudged infertile. The authors are engaged in studies of the incidence of Mycoplasma hominis and T-mycoplasmas in infertile and fertile couples, preliminary results of a double-blind controlled trial of doxycycline in the treatment of infertility of unascertained cause. One hundred and twenty infertile couples and 36 fertile couples are the subjects of the study so far conducted. The criteria of infertility, and materials and methods used, the sites sampled, and the incidence of M. hominis and T-strain mycoplasmas will be reported at the meeting.

**A Case of Carcinosarcoma of Ureter**

H. B. McDADE, E. M. ARMSTRONG, AND A. G. GRAHAM, (Departments of Pathology and Urology, Western Infirmary, Glasgow) Carcinosarcoma of ureter is an extremely rare neoplasm of which only one previous case has been described in the literature. The patient in the present case is a 65-year-old retired general labourer who presented in December 1971 complaining of haematuria and some colicky abdominal pain. Repeated cystoscopic examinations showed no significant pathology until January 1973 when a necrotic friable tumour mass was seen exuding from the R ureter. A R uretero-nephrectomy was performed in February 1973 and showed that the tumour was arising at the junction of the middle and lower thirds of the ureter and extended as a 1 cm diameter stalk of material down to the ureteric orifice. Histological examination revealed an intimate admixture throughout the tumour of both malignant epithelial and malignant stromal elements. After initially good postoperative recovery the patient presented again in May 1973 with a recurrence of symptoms and examination revealed a recurrence of tumour in the region of the R ureteric orifice. This was removed and the site thoroughly treated with diathermy. The patient has remained symptom free and in good health since then with no cystoscopic evidence of recurrence. The diagnostic difficulties and pathogenesis of this neoplasm will be discussed.

**Immunological Aspects of Hepatobiliary Disease**

A. MILFORD WARD, G. ELLIS, AND D. J. W. HURLEY, AND VALERIE A. STANLEY (Queen Charlotte's Maternity Hospital, London) There have been reports that eradication of T-strain mycoplasmas by appropriate antibiotics has been followed by pregnancy in couples adjudged infertile. The authors are engaged in studies of the incidence of Mycoplasma hominis and T-mycoplasmas in infertile and fertile couples, preliminary results of a double-blind controlled trial of doxycycline in the treatment of infertility of unascertained cause. One hundred and twenty infertile couples and 36 fertile couples are the subjects of the study so far conducted. The criteria of infertility, and materials and methods used, the sites sampled, and the incidence of M. hominis and T-strain mycoplasmas will be reported at the meeting.