

Biochemical and ultrasonic monitoring in abdominal pregnancy Description of a clinical case

by

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Secondary abdominal pregnancy with implantation in the uterine tube has been widely described in the literature.

In the case reported here, thorough monitoring was possible.

DESCRIPTION OF CASE

A woman (para I, gravida III) was admitted to the Obstetric and Gynaecological Clinic of the University of Padua during the tenth week of pregnancy, diagnosed as threatened abortion. She had already been treated at home with oestrogen and progestagens.

The past history showed that she had been admitted to hospital on one previous occasion, at puberty, on account of slight persistent fever and abdominal swelling, but the patient could not say anything about the result of the paracentesis performed at that time.

She was admitted to hospital for the second time at the age of 21, because of high fever, asthenia, anorexia and abdominal pain. The clinical report showed that the abdomen was rounded and tense, and painful over the inferior abdominal quadrants, where a painful, non-mobile, not clearly delimited mass could be palpated. The diagnosis of tuberculous pelvic peritonitis was made and the patient was sent to a sanatorium.

At the age of 32, the patient had a pregnancy which proceeded normally to term. Three years later she had a spontaneous abortion.

On admission, the patient presented with metrorrhagia and a colic type of pain in the inferior quadrants of the abdomen. On examination, the uterus appeared to be three times larger than normal and had the consistency of pregnancy; the recto-uterine pouch was soft and painful.

The diagnosis of « suspected threatened abortion » was made. The patient was kept at rest and given antispastic therapy; and in view of the possible ectopic pregnancy, suggested by the state of the recto-uterine pouch and the past history, more thorough monitoring was carried out, since the patient's general condition was good and the symptoms (especially the haemorrhage) were attenuated.

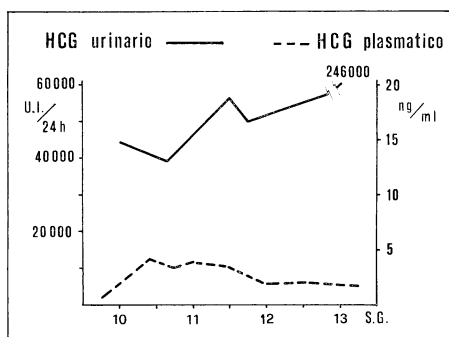
Ultrasonic scanning showed in the first phase an ovular chamber developing normally, and only ten days later an ovular chamber of irregular outline and indistinct echoes in the uterine cavity, probably due to a decidual reaction.

Vaginal colpocytological examination showed signs of oestrogenic stimulation and diminution of the mass.

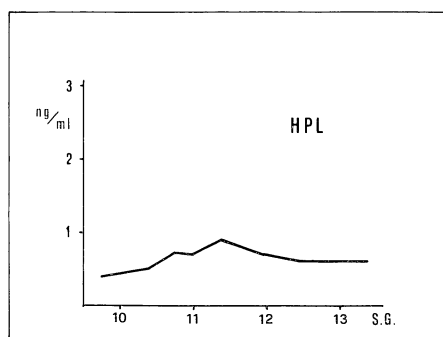
The concentration of chorionic gonadotrophin in the plasma and urine (graph 1) and that of placental lactogenic hormone (graph 2) progressed in a way not dissimilar from that of normally developing pregnancy.

The maternal plasma concentration of α -foetoprotein, on the contrary, gradually

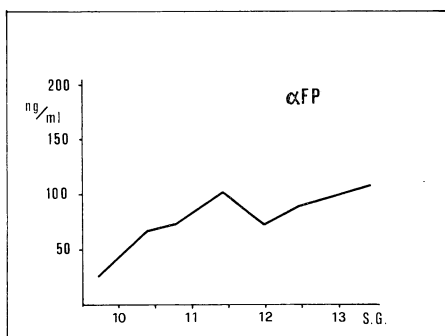
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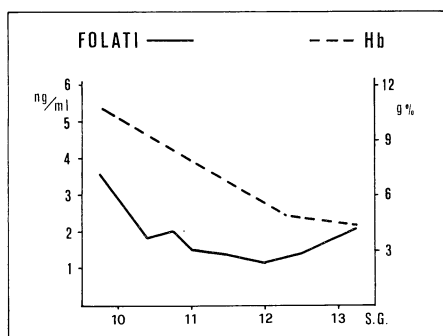
Graph 1.



Graph 2.



Graph 3.



Graph 4.

increased (graph 3) and remained high for several days, much above the normal values.

The gradual diminution of maternal serum folates was in accordance with the increasing demand due to the slow progress of anaemia, also indicated by the fall in haemoglobin (graph 4).

On the basis of the latter finding and on the return of the painful and metrorrhagic symptoms, it was decided to make an examination under narcosis; this made evident a hard mass of indefinite outline, occupying the recto-uterine pouch.

A laparotomy was performed. There was blood and a number of clots in the peritoneal cavity. The recto-uterine pouch was the site of an abdominal pregnancy, the placenta being inserted into the posterior face of the broad ligament on the right and surrounding the tube and ovary on that side, as well as being partly adherent to the sigmoid colon.

Right adnexectomy was performed; the placenta on removal had a sac which contained a live foetus seven centimetres in length.

CONCLUSIONS

What contribution can be made by biochemical and ultrasonic monitoring to early diagnosis when the clinical signs are doubtful?

In other words, is it possible, using *conservative* methods, to substitute laparoscopy?

In this case ultrasonic diagnosis did not yield conclusive results at the first attempt.

The trophoblastic indices of hormonal activity did not behave pathologically.

On the contrary, α -foetoprotein which was abnormally and persistently high in the presence of a live embryo, was the only new factor that emerged from this investigation.

In the literature on the subject this is the first report of such a phenomenon; it markedly differs from the finding in threatened abortion and imminent death of the embryonic foetus.

These finding cannot be explained in detail on the basis of our present knowledge, and will require further confirmation.

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Effects of hydrocortisone and hydroxycobalamin on the rat and rabbit foetus

Experimental teratological study

by

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Our aim was to undertake an experimental study in order to verify whether a combination of drugs commonly used in therapeutic practice, such as a cortisone and a vitamin, might have an embryotoxic action when compared in two animal species such as the rat and the rabbit.

Our chief purpose was to discover whether the embryotoxic « threshold value » already recognized for the cortisones, could be affected by the presence of a vitamin (B12 or hydroxycobalamine in this instance), and whether the presence of the vitamin might positively or negatively alter the effect of the cortisone drug.

In view of the similarity of action of the many cortisones used in therapy, we chose disodium hydrocortisone-21-phosphate as representative of this group of drugs.

An experimental study of embryotoxicity was therefore undertaken, according to the method described by Cook, M. J. (¹). This experimental study was carried out on two animal species: the rat and the rabbit.

MATERIAL AND METHODS

RAT - Adult male and female albino rats of the Sprague-Dawley strain were used.

After pairing and when fertilization had occurred, a daily check was made

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