- 7) Harrison H. R., Costin M., Meder J. B., Bownds L. M., Sim D. A., Lewis M., Alexander E. R.: Am. J. Obst. Gyn., 153, 244,
- 8) Sweet R. L.: Fertil. Steril., 38, 530, 1982.
- 9) Moller B. R., Taylor-Robinson D., Furr P. M., Toft B., Allen J.: J. Repr. Fertil., 73, 237, 1985.
- 10) Jones R. B., Ardery B. R., Hui S. L., Cleary R. E.: Fertil. Steril., 38, 553, 1982.
- 11) Gnarpe H., Friberg J.: Nature, 245, 97,
- 12) Sweet R. L., Mills J., Hadley K. W., Robbie M. O., Draper D. L.: Am. J. Obst. Gyn., 134, 68, 1979.
- 13) Gnarpe H., Friberg J.: Am. J. Obst. Gyn., 114, 727, 1972.
- 14) Stray-Pedersen B., Eng J., Reikvam T. M.:
- 14) Stray-Federsen B., Eng J., Kerkvam T. M.: Am. J. Obst. Gyn., 130, 307, 1978.
  15) Quinn P. A., Shewchuk A. B., Schuber J., Lie K. I., Ryan E., Scheu M., Chipman M. L.: Am. J. Obst. Gyn., 145, 245, 1983.
  16) Koren Z., Spigland I.: Obst. Gyn., 52, 588, 1079.
- 1978.
- 17) De Luvois J., Blades M., Harrison R. F., Hurley R., Stanley V. V.: Lancet, 1, 1073, 1974.

- 18) Andre D., Sepetjian M., Mikaelian S., Fouillet C.: J. Gyn. Biol. Repr., 7, 51, 78.
- 19) Nagata Y., Iwasaka T., Wada T.: Fertil. Steril., 31, 392, 1979.
- 20) O'Learly W. M., Frick J.: Andrologia, 7, 309, 1975.
- 21) Fowlkes D. M., MacLeod J., O'Leary W. M.: Fertil. Steril., 26, 1212, 1975.
- 22) Swenson C. E., Toth A., O'Leary W. M.: Fertil. Steril., 31, 660, 1979.
- 23) Toth A., Swenson C. E., O'Leary W. M.: Fertil. Steril., 30, 586, 1978.
- 24) Onnis A., Marchesoni D.: "Aspetti clinici dell'infezione micoplasmica in ginecologia". In: Danesino V., Rondanelli E. G.: Le infezioni in ostetricia e ginecologia. Monduzzi Ed., Bologna, 1984.
- 25) Busolo F., Marchesoni D., Musajo F., Marcolin D., Baratto D.: Clin. Exp. Obst. Gyn., *5*, 125, 1978.
- 26) Busolo F., Zanchetta R.: Israel J. Med. Sciences, 20, 902, 1984.
- 27) Busolo F., Zanchetta R.: Fertil. Steril., 43, 110, 1985.
- 28) Busolo F.: Personal comunication.

## SPONTANEOUS EXPULSION OF DECIDULIZED PSEUDOPOLYPS IN PREGNANT WOMEN WITH UTERINE MALFORMATION

### O. GANGEMI (\*) - M. PETRONE (\*) - F. CRIVELLI (\*\*)

- (\*) Obstetric and Gynaecology Division City Hospital of Gallarate, Varese (Italy)
- (\*\*) Laboratory of Surgical Pathology City Hospital of Gallarate, Varese (Italy)

Summary: Two cases concerning expulsion of decidualized polyps in early pregnancy associated with uterine malformation are described. The authors discuss the differential diagnosis between the expulsion of cervical polyps during pregnancy and the ectopic pregnancy associated with polyposis. They suggest that a spontaneous expulsion of polyps or pseudopolyps during early pregnancy may be a sign of the presence of uterine malformation.

Decidualization of endometrial mucosa is a well-known phenomenon in pregnancy. When a uterine malformation, such as uterus bicorne, is present, this phenomenon concerns both the endometrial cavities even if only one of them is the seat of placentation.

In this case, in the cavity without placenta, a trophic alteration of the decidualized endometrium occurred, with hormonal insufficiency.

Abortion or threatened abortion may be the result. Sometimes however edges of decidualized mucosa may be lost and spontaneously expelled with the appearence of cervical polyps.

In this case the histologic examination is of great importance because it indicates the presence of secretive endometrium.

We present two cases of spontaneous expulsion of early decidualized endometrium in pregnant women presenting threatened abortion, with uterine malformation (uterus bicorne unicolle).

#### CASE REPORTS

Case 1. F.C. aged 24, para 2010. At the obstetrical anamnesis she referred to having spontaneous abortion at the 8th week two years earlier, with subsequent endometrial surgical biopsy. She came to our observation during the 8th week of her second pregnancy with a threatened abortion. Hormonal dosages confirmed the status. Serum levels of routine examinations were within the rule. A few days after admission, she ejected from the vagina, fragments of reddish-brown, polypoid material. Histological examination was: "Endometrial pseudopolyp with decidualization, necrotic and hemorragic areas". Echographic control revealed a gestational situation in one of the two horns of "uterus bicorne unicolle" with echographical data of CRL, BPD and embryonal liveliness within the rule. The further cavity revealed the presence of an increased decidual thickness. Several expulsion followed the first during the 10th and the 12th week of pregnancy. Histologic examinations confirmed the first one, pointing out the presence of Arias-Stella phenomenon. The patient was discharged after adequate therapy. During the 16th week of pregnancy it ended with a spontaneous abortion. The patient then underwent a Strassman operation to resolve the uterine malformation. Echographic controls after six months documented the success of the operation.

Case 2. F. M. aged 22, para 2010. At the obstetrical anamnesis she referred to spontaneous abortion during the 20th week of pregnancy three years earlier. During this period uterine malformation was suspected and the patient underwent a histero-salpingography which documented an "uterus bicorne unicolle" (type 2 subtype B of the Musset-Belaish classification) (7).

The patient was observed by us during the 12th week of her second pregnancy because of a threatened abortion. At the echographic examination there was a gestational implant in one of the two horns of the uterus and a marked decidual hyperthrophy in the other one. CRL

and BPD indices were normal. A few days later she expelled some necrotic material from the genitalia. Histologic examination revealed secretory endometrium with decidualized stroma. After adequate therapy, with application of cervical ring after MacDonald, the patient was discharged and the pregnancy followed with out-patient controls.

It ended during 34th week with birth after surgical delivery.

#### DISCUSSION

The major problem in uterine malformation is threatened abortion, occuring with a frequency proportional to the severity of the malformation. Several authors reported an increase of it varying between 11.1% (8) and 33%, with intermediate rates of 24.2%, 26% (3) and 27,2% (6). Some uterine malformations, such as those due to developmental anomaly of Mullerian ducts, (uterus bicorne etc.) cause no pain or other symptoms. Therefore their discovery may be occasional after a spontaneous abortion. After several abortions, the uterine malformations have to be sought with accuracy (1).

Nevertheless a pregnancy in a malformed uterus can occur and above all in the "uteri setti", often with the implant in one of the two horns. In this case spontaneous expulsion of necrotic material can occur. This material presumably derives from the horn without placentation.

From the clinical point of view spontaneous expulsion of polypoid necrotic material leads to an accurate differential diagnosis with cervical polyps during pregnancy, clinically undistinguishable from endometrial ones. The histological examination assumes great importance in determining the origin of the polyp. Decidualized stroma with secretory endometrium often in association with Arias-Stella phenomenon, strongly suggests the presence of pregnancy (1, 5).

We think that the presence of threatened abortion, with expulsion of necrotic polypoid material, and histological examination that suggests pregnancy, brings into question the presence of a uterine malformation. Insufficient gonadothropinic stimulation in fact, as occurs in uterine malformations which have decreased miometrial capacity to expand, may lead to thereatened abortion and consequently to a periodic expulsion of decidual material from the horn devoid of embryo (6).

The right correlation between clinical and histological aspects of an expulsion of polypoid material in a pregnant woman with a history of threathened abortion, may lead to the discovery of uterine malformation.

The main differential diagnosis is that with ectopic pregnancy whose clinical picture in the early stages is similar. Previously described clinical examinations (4) in the early stages of pregnancy are useless.

#### BIBLIOGRAPHY

- Bigelow B.: 'Abortion' in "Pathology of the female genital tract". Blaustein A. (ed.), Springer, New York, 1977, p. 691.
- 2) Cavallero C.: "Istologia Patologica", Cavallero C. (ed.), Ambrosiana, Milano, 1965, pp. 1135-1172.
- Fenton A. N., Singh B. P.: Am. J. Obst. Gyn., 63, 744, 1952.
- 4) Gangemi O., Petrone M., Criveli F.: Quad. Chir. Pratica, 5, 167, 1984.
- Hertig A. T., Livingstone R. G.: N. Engl. J. Med., 230, 797, 1944.
- 6) Jones W. S.: Obst. Gyn., 10, 113, 1957.
- Musset R., Belaish J.: "Les anomalies morfologique de l'uterus". In: "Hypoplasies et malformations de l'appareil genital interne de la femme". Masson, Paris, 1964.
- 8) Taylor H. C.: Am. J. Obst. Gyn., 46, 388, 1943.

# DETAILED ULTRASOUND AS A SCREENING METHOD FOR CRANIOSPINAL ABNORMALITIES

P. GRECO - G. GARGANO - C. CARRIERO - L. CLERICÒ A. DIAFERIA - G. MELE - P. LOIZZI

Institute of Obstetrics and Gynecology II Clinic - University of Bari (Italy)
(Head: Prof. R. Nappi)

Chair of Antenatal Physiopathology - University of Bari (Italy)
(Head: Prof. P. Lozzi)

Summary: High resolution diagnostic ultrasound was assessed as a screening method for craniospinal anomalies during the second trimester of pregnancy in a population at low risk for neural tube defects (83,403 mothers). The effectiveness of the test was about 60% and the failure rate mainly due to late attendance. In a subgroup (9325) where the screening purposes were satisfactorily fulfilled, the detection rate (87%) was substantially greater. The significance of the results and the cost/benefit ratio, especially compared with serum alpha-feto protein screening services, are then discussed.

#### INTRODUCTION

Craniospinal abnormalities are among the most common congenital defects. Since 95% of these cases occur in pregnancies without recognizable risk factors (14),

the need for an effective screening method is obviously mandatory. Regular screening programmes with measurement of the alpha-fetoprotein concentration in maternal serum (MS-AFP) have been ini-