CONSIDERATIONS ON TUBAL STERILITY OF PRESUMED PSYCHOGENIC ORIGIN

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SUMMARY

The Authors evaluate a certain number of patients presenting primary or secondary infertility, in the search of any emotional problem which could be responsible for it.

While it is hard to demonstrate the psychological origin in some cases of infertility and to quantify its real incidence, the Authors point out the importance of ruling out any psychological factor at the beginning of the work-up for the infertile couple and particularly while ascertaining the tubal patency through the hysterosalpingography, a diagnostic technique which can be very stressing for women.

There are absolutely no doubts that in a certain percentage of sterility cases there is a psychogenic component or cause. It is extremely difficult to quantify the incidence of such conditions. The difficulty is also in the fact that even if many couples obtain fertility even during preliminary examinations or after simple attempts of therapy it is necessary for many others to wait sometimes even several years.

The percentage of incidence of sterility from psychogenic causes goes for instance up to 25% in sterile couples in Stauber's opinion ([1]). On this subject, in support of the difficulties of quantification, it seems interesting to describe a case among many other similar cases which recently came to our attention.

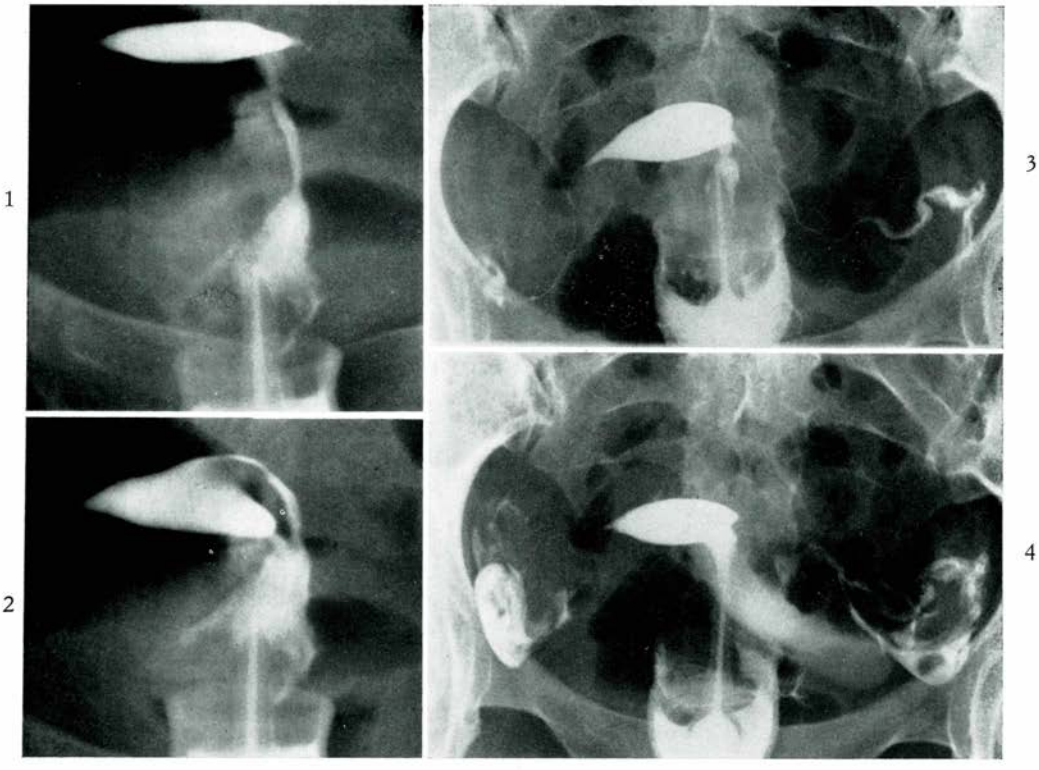
A woman medical doctor with a husband also medical doctor, at the time of writing, 42 years old, began to have intercourse without contraceptive control ten years ago and after three years of non-pregnancy, even without having been subjected to thorough controls, decided to adopt a child. Four years after the first adoption, notwithstanding normal intercourse, a second adoption had been taken into consideration, which was not possible at the time for bureaucratic reasons.

At the beginning of this year, that is after ten years of normal intercourse and seven years from the first adoption a spontaneous pregnancy came into act recently ending at the 40th week.

In this case, which could be discussed more accurately, the existence of an ambivalence between the desire of pregnancy and the desire of motherhood should be pointed out. Such phenomena seem nowadays to be very frequent.

But independently from its frequency we can suspect the existence of psychogenic sterility only after a certain number of controls excluding organic causes have been carried out.

The tripod on which the diagnostic iter is based, at least at an initial phase, is



Figs. 1, 2, 3, 4.

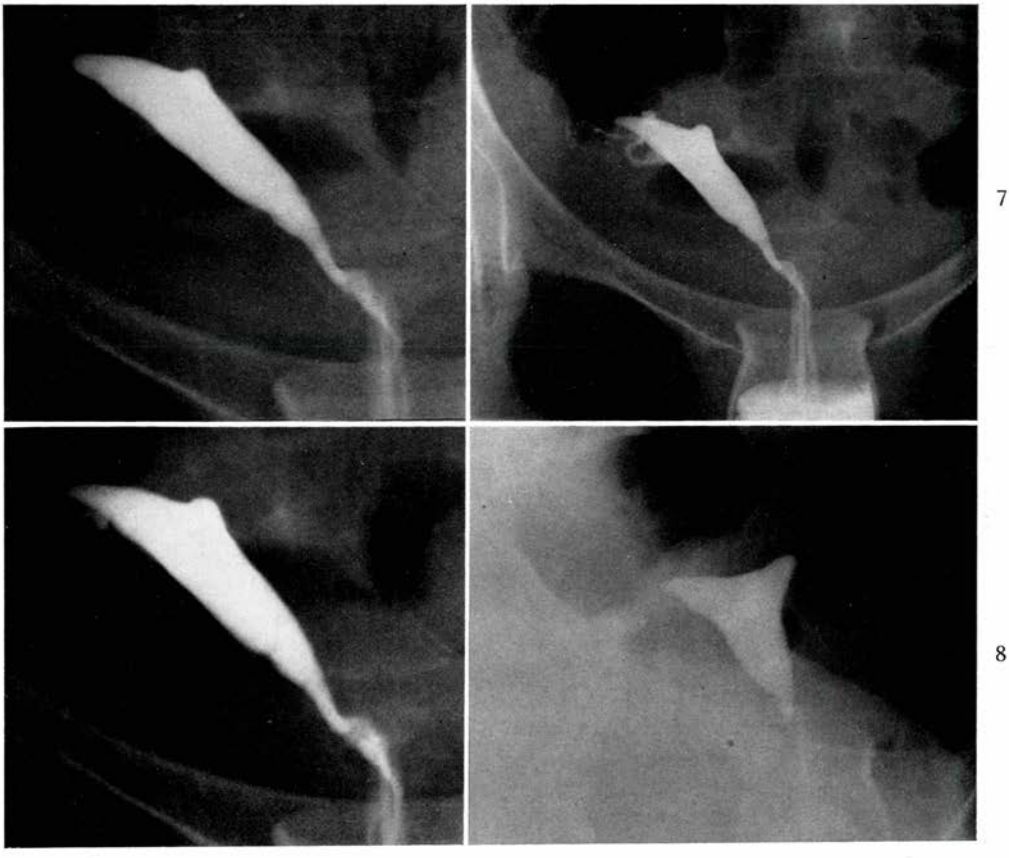
represented by the evaluation of the seminal fluid, by the presence of ovulation and by the ascertainment of tubal patency.

Omitting the first two ascertainments even if, for what concerns ovulation, the emotional components may be manifold, it is worthwhile to linger over the evaluation of the tubal patency by means of a hysterosalpingography because it is from this very important moment that we can catch in advance a glimpse of a possible emotional component.

In regard to this test we have modified in these last years our behaviour in our approach to it. In fact, since when it has been possible to follow through the monitor, in scopy, the passage of the contrast medium injected into the uterine cavity, we have realized that not always such a passage is simple and in proportion to the amount and the pressure with which the contrast medium is injected. It has, in fact, been observed that its transit through the tubes is sometimes delayed or impeded by tubal spasm and that this spasm can be nearly always overcome through the administration of antispastics or sedatives.

All this is easily explained if we take into consideration the emotional condition of the woman who, from this very examination which in most cases is done for the last, awaits a judgement sometimes an almost definitive sentence on her chances of becoming pregnant.

This type of woman furthermore in most cases knows that where a tubal obstruction exists, the possibility to obtain



Figs. 5, 6, 7, 8.

surgically even in the best equipped centres and with the most modern microsurgical techniques a positive result is, in the best of cases, not over an approximate 30-40% ([2]).

The emotional condition of the patient is moreover stressed by the fact that hysterosalpingography is considered a technically complex and undoubtedly painful test.

To clarify what has been above said it may be useful to look over the case of a woman patient F.P., 26 years old, presenting secondary sterility and who had been pregnant seven years before.

This patient, whose husband was normozoospermic and arrived at hysterosalpingography as the last test after other specific tests such as the radioimmunologic monitoring of ovulation and the post-coital test, had excluded any other cause of sterility.

At the first examination in scopy the X-ray showed a bilateral stenosis (fig. 1) which persisted notwithstanding the filling of the cavity at increased pressure (fig. 2).

At this point an intravenous injection of antispastic (butylscopolamine bromidum, 20 mg) was given. When no change be-

came apparent a second injection of the same drug was administered. After this treatment a regular passage of the contrast medium with a normal overflow in the abdominal cavity (figs. 3-4) was observed.

Evaluating with more attention the psychological conditions of the woman it later came out that the hysterosalpingography was of great importance to her since pregnancy was tenaciously desired also as a means to solve a problem of harmony which at the time was deteriorating within the couple.

It may seem of little or no account to linger over this case but much too often we see women arriving in our clinics who have submitted in other diagnostic centres to the same test (not controlled visually) in which only 2 or 3 X-rays taken in swift succession and without administration of drugs led to the sentence of tubal occlusion.

But an approach of this kind very often may not be sufficient and it is our aim to emphasize this concept. It can be evidenced by another case which happened recently to us.

A 27 year old woman M. Z. whose anamnesis does not reveal anything noteworthy. Menarch occurred at ten years of age, followed by normal and regular menstruations but in the last few years accompanied by dismenorrhea during the first day.

The patient has been having intercourse without any means of contraception for 3 years. Hormonal levels evidence the presence of ovulatory cycles and the examination of the seminal fluid present only a slight astenozoospermia.

Before hospitalization the patient had submitted at the Radiological Service of our Hospital to a hysterosalpingography which exposed in an initial phase with a moderate contrast medium filling a bilateral stenosis (figs. 5-6). At a greater filling one started to distinguish the right tube which in a second phase was filling up (fig. 7).

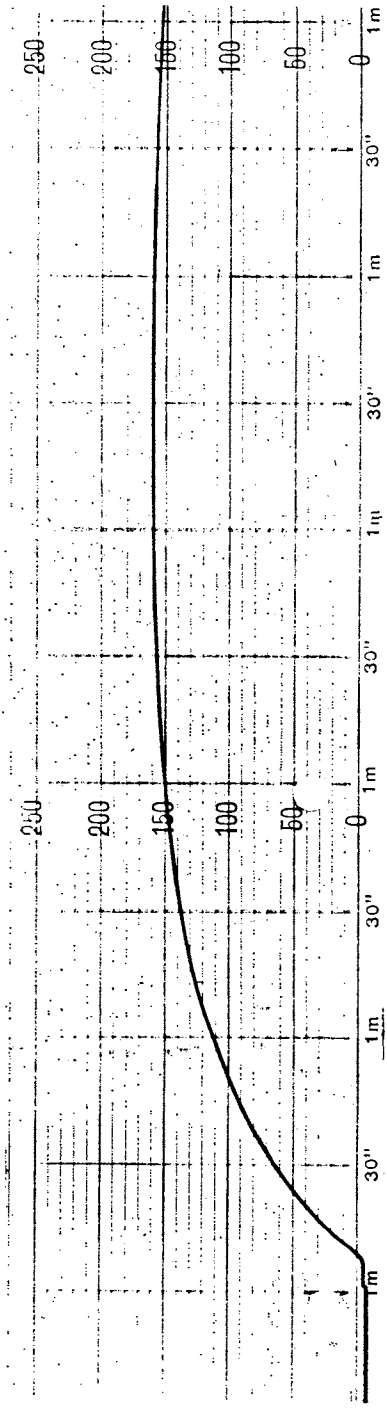


Fig. 9.

In a later X-ray the left tubal stenosis and a moderate filling of the right tube with a controversial doubtful spreading of the contrast medium into the abdominal cavity could be observed (fig. 8).

During hospitalization before submitting the patient to a laparoscopy it was decided to perform a tubal hysteroinsufflation whose picture showed a typical proximal bilateral tubal occlusion (fig. 9).

It must be noted that an antispastic as well as a sedative (Diazepam 10 mg) injected intravenously had been administered during hysteroinsufflation.

After these examinations it was decided to omit laparoscopy and to operate in the tubes.

On the operating table, during the preoperatory salpingochromoscopy, it was observed, not without surprise, that the dye flowed freely into the abdominal cavity through both tubes. Therefore for this patient antispastics and sedatives were not sufficient to overcome tubal spasms which instead were controlled during surgery by general anaesthesia.

We have cited these two cases because we think it is important to remember that in each moment of the diagnostic steps a non organic cause can be evidenced or suspected. In regard to hysterosalpingography it is absolutely necessary to think about these possibilities and therefore one must not consider significative the tests which have not followed determinate rules. The climate and the way in which these examinations are done is also extremely important. This is valid for all diagnostic tests but expecially so in this type of test ([3, 4, 5, 6, 7]).

At times, as it comes out from our experience, a reassuring attitude and a good emotional availability are sufficient to solve certain spasm situations where, as we have already said, not even generous amounts of drugs can overcome them.

The presence of a tubal spasm in almost all the cases solvable with an antispastic or a sedative or with the correct behaviour of the staff is surely an indicator of inner emotional problems. It is important to promptly recognize this situation because it is only at the beginning of the various diagnostic steps of each sterility case that we must keep into consideration all the facets of the problem so as to organize in the right way a complete and suitable therapeutic strategy.

BIBLIOGRAPHY

1) Stauber M.: *Psychosomatik der sterilen Ehe.* Ed. Grosse-Verlag, Berlin, 1979.
2) Cognat M., Cittadini E.: *Co. Fe. Se., 5* (1), 39, 1978.
3) Swolin K., Rosencrantz M.: *Fertil. Steril., 23*, 270, 1972.
4) Boyd J. E., Holt E. M.: *J. Obst. Gyn. Br. Cwlth., 80*, 142, 1973.
5) Tramontana S., Allocca G., Pamariello S., Borelli A. L., Caserta R., Raucci F.: *Arch. Ost. Gin., 83*, 31, 1978.
6) Brolin J., Lannering B.: *Fortsch. Röntgenstr., 133*, 510, 1980.
7) Dupont P., Cyr G., Cloutier D., Rioux J. E.: *L'Union Méd. Canada, 109*, 599, 1980.