

# **INTRAVASATION DURING HYSTEOSALPINGOGRAPHY USING LOW VISCOSITY OIL BASE CONTRAST MEDIA**

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High viscosity oily contrast media in hysterosalpingography (HSG) may cause two serious complications: haematic and lymphatic intravasation with embolization and granuloma formation (<sup>1, 2</sup>).

Nowadays, as well as using hydrosoluble contrast media, it is also possible to carry out HSGs with low viscosity oily contrast media which do not appear to cause the above mentioned complications (<sup>3</sup>).

Ultra Fluid Lipiodol is a low viscosity oily contrast medium containing poppy seed oil with 40% iodine.

The purpose of this communication is to examine complications following lymphatic intravasation occurring in women during HSG with Ultra Fluid Lipiodol.

## **MATERIAL AND METHODS**

Between 1st January 1980 and 30th June 1982, 119 HSGs were performed in our Division for sterility, suspected uterine malformations and other pathologies.

The HSGs were carried out in absence of classical complications (<sup>3</sup>), during the proliferative phase of the cycle, without medication or anaesthetics and under fluoroscopic control. A Schulze hysterosalpingograph was used. The instillation pressure of the contrast medium was subjective, the quantity of Ultra Fluid Lipiodol used for each HSG was of 5-10 ml.

## **RESULTS**

There were two cases of intravasation. In both cases intravasation affected the lymphatic vessels (figs. 1, 2). The two patients had no embolism or any other disorder. In both cases, thanks to the fluoroscopic control, the instillation of the contrast medium was immediately suspended. Neither woman was given a chest X-ray. The clinical features of the two cases are summarized in table 1.

## **DISCUSSION**

The incidence of intravasation in our series of HSGs with Ultra Fluid Lipiodol is 1.8%. The clinical manifestations are also described in table 1.

## **SUMMARY**

Complications of low viscosity oily contrast media in hysterosalpingography are taken into consideration in a group of 119 examinations. Intravasation occurred in two cases without posing any clinical problems. Safety in low viscosity media is stressed.



Fig. 1.



Fig. 2.

Table 1. — *Clinical features of the two reported cases of intravasation.*

Case No.	1	2
Age	22	35
Parity	G2, Ab1, P1	G0
Indication	Secondary amenorrhea	Infertility
Previous surgery	Abortion curettage	None
Uterine cavity	Adhesions	Normal
Tubes	Normal	Non filling right (not further evaluated)
Day of cycle	9	11
Symptoms	None	None
Intravasation type	Lymphatic	Lymphatic
Intravasation location	Parametrial bilaterally	Tubal bilaterally
Embolism	No	No

We emphasize that, at least in our experience, both the day of the menstrual cycle on which the HSG is carried out, as reported by Williams (<sup>4</sup>), and the presence of a uterine pathology, may be considered to influence intravasation. Contrary to the findings of Siegler (<sup>1</sup>) there is no evidence in our two cases of tubal pathology. The absence of embolism or any other disorder in the two patients with intravasation, together with the findings of the Authors (<sup>3</sup>) allows us to stress

that in HSG, Ultra Fluid Lipiodol, under fluoroscopic control, can be used with all safety.

#### BIBLIOGRAPHY

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