Fertility and conservative treatment in the early stage of cervical cancer

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Summary: The purpose of this study was to check fertility after the conisation of the cervix.
Authors followed-up 74 conized women: 24 became pregnant and of the rest of them, 28 used contraceptive methods and 22 never became pregnant again.
76% of the pregnancies were normal. In only one case, in which the pregnancy was twin, was it necessary to use a cervical cerclage for cervical incontinence.
Therefore conisation does not seem to be a limiting factor to fertility.

Key words: Fertility; Cervix conisation.

INTRODUCTION

Gynecologic oncology has certainly made great progress, thanks to the possibilities of carrying out mass screening and to the availability of ever more diagnostic and instrumental techniques.

With regard to conisation of the uterine cervix there has been a considerable increase in dysplastic forms and in carcinoma in situ, but at the same time the average age of the patients is lower than it was in the past.

The young age of the patients and early diagnosis present the necessity for carrying out therapies adapted to guaranteeing radical excision while at the same time preserving normal sexual and reproductive ability.

Conisation is considered the treatment of choice for dysplasias, carcinoma in situ and in selected cases of microinvasive carcinomas: in fact no significant differences have been noted in the incidence of relapses between patients treated by conisation in respect to those treated by hysterectomy ([4, 6]).

Much has been said about the complications which may follow conisation. In the 60's Blaikley and Williams considered that conisation altered the secretion of cervical mucus and interrupted the functional continuity of the neck of the uterus, compromising the woman's fertility ([1, 5]).

MATERIAL AND METHODS

In our study we considered patients of fertile age who had been submitted to conisation for carcinoma in situ and microinvasive carcinoma of the cervix at the Obstetric and Gynecologic Clinic of the University of Padua between 1970 and 1988.

Patients who had been submitted to total hysterectomy after conisation were of course eliminated from the study.

We evaluated fertility, evolution of pregnancy and outcome at delivery.

In order to have an objective evaluation of the real fertility of patients after conisation, we also considered the use or otherwise of contraceptive methods.

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Clin. Exp. Obst. Gyn. - ISSN: 0390-6663
XIX, n. 1, 1992

Table 1. – *Evaluation of reproductive capacity after conisation.*

	Conception					No conception	
	24					50	
Total patients	74	IVG	I Pregnancy	2 Pregnancy	Total deliveries	Contra-ception	No contra-ception
Total conception	24	2	19	3	25	28	22

RESULTS AND DISCUSSION

We were able to follow 74 patients in fertile age who had been submitted to conisation between 1970 and 1988.

Of the 24 women who had conceived: 19 had only one pregnancy, 3 had two pregnancies and 2 had voluntary interruption of pregnancy.

Of the 50 patients who had not conceived only 28 had used contraceptives (Tab. 1).

The age of our patients were evenly distributed throughout the range from 25 to 36 years (Tab. 2).

In Table 3 the parity of the women who conceived is analysed, evaluated before conisation, with the aim of comparing their reproductive capacity before and after operation.

10 patients were nulliparous and 12 had had one or more children, while 2 had had miscarriages during the first month of pregnancy.

Our work has therefore been completed with the analysis of the progress of the pregnancies and the method and type of delivery (Tab. 4).

With regard to the course of the pregnancies there were two cases of premature rupture of the membranes at the 30th gestional week; one case of threatened miscarriage at the 23th gestional week, two cases of threatened premature delivery, resolved by lissive treatment; one case of twin pregnancy which had to be resolved by cervical cerclage because of segmentary cervical incontinence (this was also carried out in the Obstetric and Gynecologic Clinic of the University of Padua).

The remaining pregnancies followed a normal course.

Regarding the modality of delivery, 17 patients (68%) delivered vaginally, 5 before and 12 after the 38th gestional week.

Table 2. – *Age of patients at the time of conception after conisation.*

AGE	No. of patients
⩽25	1
26-30	10
31-35	6
⩾36	7
	Total 24

Table 3. – *Parity of patients before conisation.*

	No. cases
– Nullipara	10
– Primipara	6
– Pluripara	6
– Miscarriage	2
	Total 24

Table 4. – *Time and method of the type of delivery in patients who conceived after conisation.*

	No cases	Before 38° G.W.	After 38° G.W.
Normal delivery	17	5	12
Operative delivery	8	3	5
Total	25	8	17

The remaining 8 patients (32%) were submitted to cesarean section, 3 before the 38th gestional week (at the 30th, 34th and 35th weeks respectively) and 5 at full term.

The indications for cesarean section were, in two cases, acute fetal distress, in two cases failed undertaking of the fetal part presented, in one case premature rupture of membranes, in one case the impossibility of removing the cerclage previously carried out vaginally, and finally, two cases of iterative cesarian section.

The incidence of miscarriage among the 24 patients who conceived after conisation was only 16% (4 cases).

Three miscarriages occurred in the first trimester of pregnancy and one in the second - this latter being the outcome of a twin pregnancy and due to cervical incontinence.

The same patient, when pregnant again, had another twin pregnancy, and in this case was submitted to vaginal cerclage.

CONCLUSIONS

With this study, which is to be considered preliminary, given the small number of cases we have been able to evaluate, we have attempted to evaluate the reproductive capacity of women who have undergone conisation.

The results obtained are in agreement with other Authors ([2]).

In the group of women we observed there were, in fact, no complications during pregnancy or delivery that could be attributed to conisation, if we exclude the case of cervical incontinence which could, anyway in part, be attributed to a twin pregnancy.

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