

Figure 2

Figure1 and 2: distribution of patients following the conversion of their surgical procedure from laparoscopy to classical open surgery and the reasons for these conversions

c- Post-operative follow-up

- Post-op stay period

Table3: post-op stay period patient's distribution

Period of hospitalization (days)	Number (n)	Frequency (%)
Less than 5	646	94.9
From 5 to 9	29	4.3
From 10 to 14	3	0.4
From 15 to 19	0	0.0
From 20 to 24	1	0.1
From 25 and above	2	0.3
Total	681	100

The average post operation hospital stay period was 2.95+/-1.96 days.

- Presence of an infertility factor in post-op

The phone numbers of 215 patients permitted us to follow 49 patients. Among the 49 patients, 8 of them still had some infertility factors whereas 39 didn't. The figure below shows their distribution.

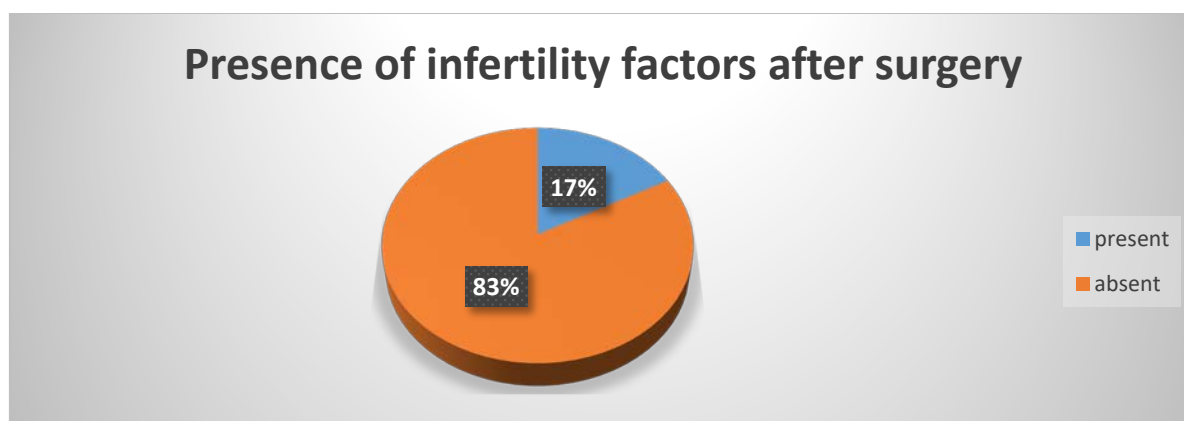


Figure 3: infertility factor presence after laparoscopy for the 49 women followed up

- Variation of the pregnancies after laparoscopy

In the course of this study, female pregnancy results after laparoscopy was less than or equal to 18 months for 5 patients. Then extra uterine pregnancies were the most frequent with 93.3% of the cases, hence, the variation resulted to a 64.1% birth of a normal living baby. Below is a distribution of the variations of pregnancies in women after laparoscopy.

Pregnancy variations	Number (n)	Frequency (%)
Pregnant	8	20.5
Spontaneous abortion	6	15.4
Living foetus	25	64.1
Total	39	100

DISCUSSION

In the room theaters of our hospitals of study, laparoscopic surgery was mainly indicated for gynecologic pathologies. The frequency of tubal laparoscopy was of the order of 63.09%. It is similar to that of FOGANG who obtained in a study a frequency of 61.71% in Mali (2013) but less greater than that of TSACHOUA who obtained 72.03% in Mali (2006). The difference may be as a result of the fact that we considered in the course of this study all infertility cases whereas TSACHOUA considered only

infertilities concerned with the fallopian tube. Also, ageing is a factor of infertility. This is so because, a women aged 35 years have less than 5% chances of getting pregnant which constitute a state of hypo fertility. And, the rate of fecundity becomes null at menopause [11]. In this study, obtained results are similar to that of SALMA AIT where it is 33 years in morocco (2008).

The constant of this age in reviews and literatures, may be as a result of the fact that, at this age, the woman is at mid procreation period and the desire to get pregnant is very high. Furthermore, all the socio-professional groups were represented in the study with housewives predominance, similar with Malian data studies [35, 36, 38]. This may be the consequence of the fact that, in Africa and Cameroon in particular, housewives constitute the greater portion of the female population an age of procreation. However, most of the women had no medical nor surgical past history. The notion of repeated genital infection was observed in the studies of SINDHU and TRAORE Y. The frequency of this genital infection may be as a result of the recrudescence insufficient or bad body hygiene and sexually transmissible infections and post-abortions badly treated or not treated at all. Which gives the fallopian tube a macroscopically abnormal aspect at coelioscopy because of adhesions. Obtained results are different from those of TSACHOUA who obtained instead a predominance of hydro **salpinx** with 24.6%. This observed difference may as such be because of the non-consideration of tubal adhesions by the authors. In fact, pelvic adhesions, mostly after-effects of surgical interventions and infections are frequent causes of tubal infertility. Blue methyl action revealed a predominant bilateral distal tubal obstruction before surgery. However, after surgery, the tubes were permeable. This explains the efficiency of surgery in these tubal obstructions. As such, these obstructions remains the principal indication of laparoscopy. We recorded during this study a 75.9% discordance between the results of the HSG and that of the action of blue methyl. This discordance is equally found in reviews [35,36,44,46,47]. The major reasons for this discordance may be the existence of functional spasm at the uterine horns, viscosity of

the products of radiographic contrasts and wrong obstructions when the contralateral passage is heavy.

Concerning surgery and technics, pelvic adhesiolysis constituted the main therapy. The procedures were realized with minimally invasive technics which brings out the benefits of laparoscopic surgery compared to open classical surgery. But, obtained results differs from that of FOGANG still because in his study, he considered equally associate technics. Nevertheless, the decision of conversion remains a wise decision because for the most it permits to minimize per operative complications. Hence, the conversion for open surgery was less frequent because most of the gynecologist of the study carried out by FOGANG had a good mastery of laparoscopic surgery. In fact, our hospitals of study, a part of the gyneco-obstetric and pediatric hospital of Douala, the most recent, all have at least 15 years of professional experience. In addition, the average hospital stay period was 2.95 ± 1.96 days. This result is near to that recommended in reviews, that is 2 to 3 days [7,38,39]. hence coelioscopy greatly reduce hospital stay period.

CONCLUSION

Evaluate the contribution of laparoscopic surgery in the treatment of female infertility was the principal objective of this study. We retain as such that, the average infertility period of women in this study was 7 years and mainly concerned secondary infertility related for the most to after-effect infections. The best means of exploration and tubal permeability check-up of the related lesions is coelioscopy. It is so because it permits to put in evidence lesions that cannot be revealed by hysterosalpingography and equally treats them. Adhesiolysis, fibroplastia and salpingostomy are the therapeutic procedures carried out in distal tubal obstructions and give as results: 97% intra uterine pregnancies and 3% extra uterine pregnancies. Majority of the pregnancies come up immediately the year following surgery. It is therefore establish that,

coeloscopy have taken an important place not only for diagnosis of female sterility but equally in the treatment management of infertility in general.

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