

**ULTRA STRUCTURE AND LAPAROSCOPIC  
EVALUATION OF THE DISTAL END OF THE  
FALLOPIAN TUBE IN CASES OF  
TUBAL FACTOR INFERTILITY**

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### ABSTRACT

**Objective :** (1) To study the ultra structure of the endosalpinx of the distal end of the tube by light and electron microscope and correlate the percentage of ciliated cells (PCC) with the reproductive success in cases of distal tube occlusion. (2) To identify intraoperative factors that affect the prognosis in cases of distal tube obstruction.

**Method :** A prospective clinical study carried out at Ain Shams University Maternity Hospital, Laparoscopic Unit over 2 years from 2001 to 2003.

**Patients :** 35 patients were included in this study (30 cases with distal tubal factor of infertility, and 5 Control group). Tubal biopsy was assessed in all cases by light and electron microscope.

**Main outcome measures :** Intrauterine pregnancy rate (IUP), Take Home Baby (THB).

**Results :** In patients with distal tubal factor of infertility there were significant association between percentage of ciliated cells and the fertility outcome, patients with PCC  $\geq$  30% the IUP rate was 44.4%, (TUB) rate was 33.3% while in patients with PCC less than 30% the intrauterine pregnancy rate was 9.5% and the term pregnancy rate (THB) was 4.75%. Mucosal appearance affects the prognosis of distal tubal surgery. Patients with  $>$  75% preserved mucosal folds had IUP rate 44.4% and THB rate 33.3%. Those with less than 75% preserved folds diagnosed by light microscopy or laparoscopy had IUP rate 9.52% and THB rate 4.76%.