

# TOTAL PERITONEAL GUTTER REMOVAL VERSUS RANDOM PERITONEAL BIOPSY IN CASES OF OVARIAN CANCER

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## Introduction

Peritonectomy is a crucial part of the surgical treatment for ovarian cancer. Visual inspection and palpation are not reliable methods for determining the extent of tumour involvement. Gynecologic oncologists are suspicious about the benefits of a full peritonectomy, concerned about the benefits and hazards.

The removal of the entire parietal peritoneum may be of no benefit if the visceral peritoneum is not removed, but there was a higher incidence of overt and occult disease in parietal peritoneal regions compared to visceral regions, implying that removal of the entire parietal peritoneum may be beneficial.

## Aim of the work

The aim of this study was to compare between total peritoneal paracolic gutter removal and random paracolic peritoneal biopsy in cases of ovarian cancer.

## Patients and Methods

### PATIENTS

This prospective study was conducted on 130 patients with early ovarian cancer in El-shatby hospital, Faculty of Medicine, Alexandria University.

For each patient, we took random and total paracolic peritoneal biopsy and compared between them regarding timing, post operative complications, and histopathological results.

Inclusion criteria: suspected ovarian cancer using IOTA score, absence of nodules in the peritoneal gutter using CT and staging laparotomy for primary ovarian cancer.

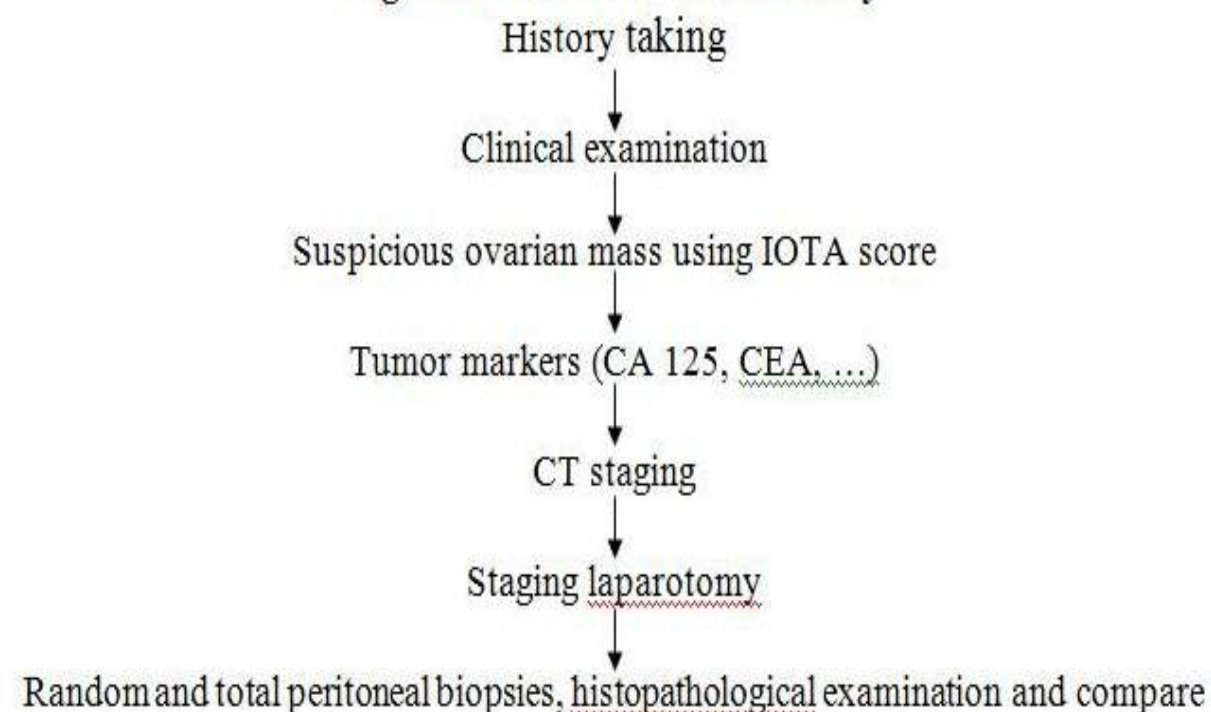
### METHODS

Random peritoneal biopsy is taken by grasping a snip of peritoneum at the paracolic gutter by coagulation diathermy or better by a scalpel.

Paracolic peritoneal gutter, is totally excised by opening at the white line to allow colon mobilization from below upwards till we reach to phrenicocolic ligament on left side or hepatic flexure on right side. After complete mobilization of the colon, dissection of peritoneum is continued from medial to lateral till we reach midline incision.

Random and total paracolic peritoneal biopsies will be collected from the same case and sent to the lab of pathology for histopathological examination and the results will be compared regarding positivity of metastasis.

### Algorithm of methods of the study



## Results

Random paracolic peritoneal biopsy showed positive metesatasis in 6 (4.6%) cases and free in 124 (95.4%) cases while total paracolic peritoneal gutter removal showed positive metesatasis in 19 (14.6%) cases and was free in 111 (85.4%) with Chi-square test was 7.479 and P value was 0.004 which is statistically significant.

108 (97.3%) cases had negative random paracolic peritoneal biopsy and negative total paracolic peritoneal gutter removal, 3 (2.7%) cases had positive random paracolic peritoneal biopsy and negative total paracolic peritoneal gutter removal, this is due to nature of implants which were removed randomly , 16 (84.2%) cases had positive total paracolic peritoneal gutter removal and negative random paracolic peritoneal biopsy & 3 (15.8%) cases had positive total paracolic peritoneal gutter removal and positive random paracolic peritoneal biopsy.

**Table 1:** Comparison between random paracolic peritoneal biopsy and total paracolic peritoneal gutter removal (n=130)

Positivity	Random peritoneal biopsy		Total peritoneal gutter removal		$\chi^2$	McNp
	No.	%	No.	%		
Negative	124	95.4	111	85.4	7.479	0.004
Positive	6	4.6	19	14.6		

**Table 2:** Agreement between random paracolic peritoneal biopsy and total paracolic peritoneal gutter removal (n=130)

Random peritoneal biopsy	Total peritoneal gutter removal				$\chi^2$	$^{FE}p$
	Negative (n=111)		Positive (n=19)			
	No.	%	No.	%		
Negative	108	97.3	16	84.2	6.311	0.04
Positive	3	2.7	3	15.8		
$\kappa$ (Level of agreement)	0.183 (0.012)					

## Conclusion

Total paracolic peritoneal gutter removal has higher detection ability in comparison to taking random paracolic peritoneal biopsy. The technique of this procedure is more complex. Postoperative complications show no difference between them.