Feasibility of Intraperitoneal Chemotherapy in Epithelial Ovarian Cancer: Experience in Tata Medical Center ,Kolkata

Barnali Ghosh, Dweep Jindal, Joydeep Ghosh, Manisha Karar, Supriya Mandal, Ajit Mukhopadhyay, Asima Mukhopadhyay*
*corresponding author: asima.mukhopadhyay@tmckolkata.com

INTRODUCTION

❑Ovarian carcinoma is treated by combination of chemotherapy & surgery.

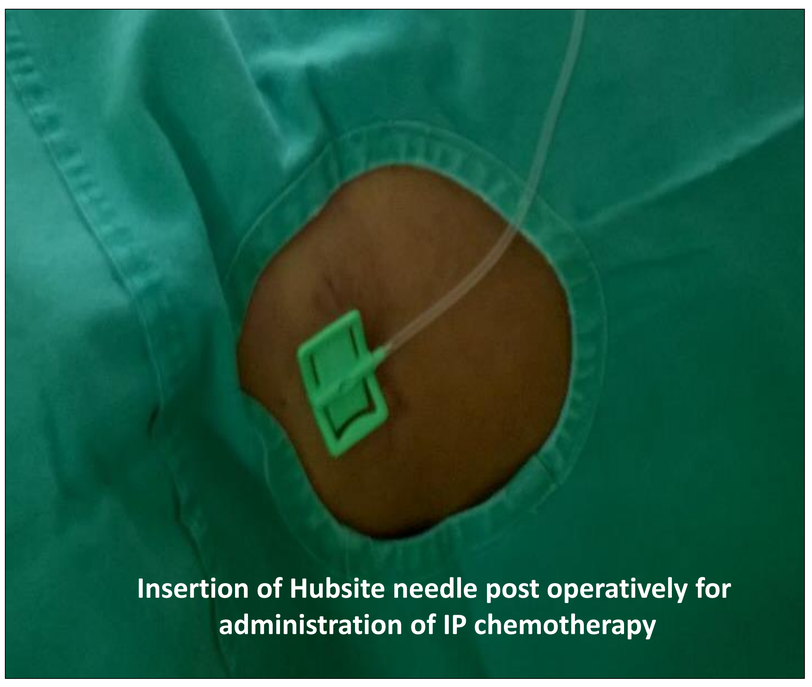
❑3 large inter group phase III trials (GOG 104,114,172) have demonstrated survival benefit associated with IP chemotherapy over IV chemotherapy. GOG 172 trial demonstrated 16 months survival benefit with the use of adjuvant IP chemotherapy.

AIMS

Aim of the study was to compare:
✓Progression free survival
✓Complications
✓Quality of life after 6 months of surgeryin Intraperitoneal (IP) vs. Intravenous chemotherapy (IV) groups.

METHODS

❖Data received from electronic hospital medical record(HMS).
❖Study span- February 2017 –July 2018
❖Patients included-Stage III & stage IV epithelial ovarian carcinoma who underwent optimal cytoreduction(cc0,cc1, cc2<1cm)



Insertion of Hubsite needle post operatively for administration of IP chemotherapy

CONCLUSIONS AND FUTURE PLANS

❑**Intraperitoneal chemotherapy is an effective adjuvant chemotherapy option in epithelial ovarian cancer with acceptable toxicity and logistic limitations.**
❑**We plan to compare normothermic IP chemotherapy with other modalities like hyperthermic intraperitoneal chemotherapy in a clinical trial setting.**

References:I
1. Wright et al. Use and Effectiveness of Intraperitoneal Chemotherapy for Treatment of Ovarian Cancer. *J Clin Oncol 33:2841-2847.*
2. Armstrong et al. Intraperitoneal Cisplatin and Paclitaxel in Ovarian Cancer. N Engl J Med 2006;354:34-43.
3. Jaka et al. Intraperitoneal Chemotherapy for Epithelial Ovarian Cancer – Single Center Experience. Indian J Surg Oncol (September 2012) 3(3):262–266 al

Acknowledgement: Dr William Helm, UK
Jiv Daya Foundation, USA, Dept of Gynaecological Oncology, Dept of Medical Oncology ,TMC Kolkata

RESULTS : IP ADJUVANT CHEMOTHERAPY

Total ports inserted	**N=39**
PDS	**30**
IDS	**9**
Total chemotherapy received	24
PDS	15
IDS	9
Mean age	52.1
BMI	24.8
Optimal cytoreduction	
CC0	12
CC1	9
CC2	3
Tumour Histology	High grade serous
Mean baseline CA 125 value	2481.2
Cycle received	C3:10 , C4: 1 ,C5: 1,C 6 : 12
Recurrence	15 (PDS-8 ,IDS-7)
Median of PFS	15 months

Reasons for inability to administered planned IP chemotherapy dose	
Port related	5
Anaemia	8
Elevation of liver enzyme	1
Intra abdominal collection	1
Poor performance status	3
Logistic issue	3

RESULTS : IV ADJUVANT CHEMOTHERAPY

Total Patient	**32**
PDS- IDS-	10 22
Mean age	55.1
BMI	26.6
Optimal cytoreduction CC0 CC1 CC2	 21 9 2
Histology	High grade serous
Mean baseline CA 125 value	2455.5
Recurrence PDS IDS	17 2 15
Median PFS	12 months

Measures utilized to overcome complications & toxicities (cycles)	
Dose reduction	4
Change in IP drug	2
Switch to IV	2
Increase cycle interval	4
Omission of Day 8 IP	8

COMPARISON BETWEEN IP AND IV CHEMOTHERAPY

Complications		
	IP (N=24)	IV (N=32)
Port related	20.83%	--------
Hematological	29.16%	28.13%
Hepatotoxic	4.16%	nil
Neuropathy	20.83%	21.9%
Nephrotoxic	4.16%	nil
Infection	4.16%	3.13%
Febrile Neutropenia	4.16%	nil
Gastrointestinal	12%	

Grade of complication (CTCAE4.03)		
	IP (N=24)	IV (N=32)
Grade I	6 (25.0%)	13 (40.6 %)
Grade II	14 (58.3%)	14 (43.7%)
Grade III	3 (12.5%)	4 (12.5%)
Grade IV	1 (4.1%)	1 (3.13%)

Recurrence		
	IP (N=24)	IV (N=32)
Total	15	17
Platinum resistant	2(8.33%)	10(31.25%)
Median PFS	15 months	12 months

Quality of life after 6 month of surgery (Frequency of symptoms) showing no significant difference between groups		
	IP (N=24)	IV (N=32)
Trouble in long walk	37%	27.2%
Pain	20%	8%
Trouble of Sleeping	8.33%	8%
Felt weak	38%	24.2%
Constipation	25%	21.2%
Tingling sensation of hand & feet	42%	40%
Urgency of urine	12.5%	21.2%
Hot flushes	20.83%	27.27%
Depression	33.33%	30.3%
Interested in sex	4.16%	6%