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PERIOPERATIVE AND INTRA OPERATIVE MANAGEMENT OF DEBULKING SURGERY OF PSEUDOMYXOMA PERITONEI PATIENT.

Anaesthesiology

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ABSTRACT

Pseudomyxoma peritonei is a rare type of cancer that affects the peritoneal cavity. The name literally means "false mucinous tumor of the peritoneum. It's called a false tumor because this cancer doesn't actually grow into solid tumors. Instead, it spreads by continuously producing mucin. Causes– Intraperitoneal extravasation of mucinous cells from cystadenoma/ cystadenocarcinoma/ Muciousadenoma/ Mucinousadenocarcinoma. Most common site of origin Appendix. Case Details - 39yrs Female, Nulliparous, complains of progressively increasing abdominal mass since last 8 months with symptoms of NYHA grade 3 breathlessness, difficulty in passing stools, generalized weakness, loss of appetite, vomitting and regurgitation of food, irregular mensis, swelling in Bil legs causing difficulty in walking. O/E positive findings seen- Cachexic, Orthopnea, comfortable only in propped up, pallor and Bil Severe pedal edema of pitting type extending upto knee, decreased bil basal airentry. Treatment of choice is extensive open abdominal surgery to remove the affected tissues called cytoreduction followed by chemotherapy.Intra operative management primarily depends on the fluid balance in such pts undergoing massive debulking surgeries and the post operative morbidities and mortality will be effected drastically based on the intra operative haemodynamic stability maintained.

KEYWORDS

Pseudotumor peritonei, Pseudomyxoma peritonei, Perioperative management, Anasethetic management.

INTRODUCTION

Pseudomyxoma peritonei is a rare type of cancer that affects the peritoneal cavity. The name literally means "false mucinous tumor of the peritoneum. It's called a false tumor because this cancer doesn't actually grow into solid tumors. Instead, it spreads by continuously producing mucin.

Causes –

Intraperitoneal extravasation of mucinous cells from cystadenoma/ cystadenocarcinoma/ Muciousadenoma/ Mucinousadenocarcinoma. Most common site of origin Appendix.

Treatment of choice for it is surgical removal of tumor cells [Debulking/ Cytoreductive Sx] followed by chemotherapy. Surgical extent depending on tumor cells spread may include peritonectomy, omentectomy, small bowel resection, spleenectomy, hysterectomy etc. Intraoperative anaesthetic complications seen in such patients include: Massive debulking leading to sudden fall in intraabdominal pressure leading to fall in Blood pressure due to splanchanic blood circulation increasing,fluid loss due to massive third space loss, Blood loss due to massive debulking, thromboembolism of mucinous cells, thromboembolism due to DVT commonly seen in these pts.

Case Details

39yrs Female, Nulliparous, complains of progressively increasing abdominal mass since last 8 months with symptoms of NYHA grade 3 breathlessness, difficulty in passing stools, generalized weakness, loss of appetite, vomitting and regurgitation of food, irregular mensis, swelling in Bil legs causing difficulty in walking.

O/E positive findings seen- Cachexic, Orthopnea, comfortable only in propped up,pallor and Bil Severe pedal edema of pitting type extending upto knee, decreased bil basal airentry.

Thorough work up done which showed positive findings of- Mod. anaemia(10.2 Hb.)and normal PLT count and WBC count, Hypoalbumenia (Alb. 2.72) with normal Sr.protiens value, CXR- increased bronchovascular markings with High diaphragm.

Specific Investigations showed C.T. A+P- 35cm by 30cm ill defined hypoechoic mass with loculations and septations completely filling peritoneal cavity with compression of nearby organs bil ovaries not seen separately S/O Mucious cystadenoma of ovaries with pseudomyxoma peritonei,Markers – CEA, CA125, CA19.9 Positive, Rectal biopsy and Rt illiac fossa Bx showed - fibrocollagen+ extracellular mucin,

Peri Operative Workup

Complete and thorough pre anaesthetic evaluation of patient done with detailed history taking and examination.

Work up of patient included complete routine investigations CBC, RFT, LFT, S.E. , ECG, CXR.

DVT prophylaxis
Additional Investigations such as USG A+P, C.T. A+P, Markers (AFP, CEA, CA125, CA19.9,Beta HCG, Rectal FNAC and biopsy, Rt iliac fossa biopsy.

Pt. planned for debulking surgery with peritonectomy, omentectomy and Bil salpingoophorectomy. Followed by chemotherapy.

Intra Operative Course

Central line placed.
DVT pump and warming blanket placed.
Adequate blood and blood products reserved.
ICU Bed with ventilator reserved.
Induced on Propofol 120mg+ Ketamine 50mg and scoline 100mg.
Analgesic used- Fentanyl and PCM.
Intraoperatively pt. was started on Noradrenaline 2hrs into the debulking surgery and was progressively incremented based on b.p. due to sudden debulking and removal of 23 liters of third space fluid + mucinous content along with a blood loss of 800ml.
Fluid replacement of the above was done with a total of 3 pint N.S, 3 pint R.L, 2 pint FFP, 2 pint PCV. Followed by mid B.T. lasix 10mg given once N.A. requirement was tappered.
Once fluid balance was maintained and loss replaced N.A. was slowly tapered towards closure of the procedure
Patient ABGA was done intra.op. to reveal a metabolic acidosis picture developing hence NaHCO3 was started intra op towards end of procedure.
Post B.T. pt was given 10cc Ca Gluconate
Procedure lasted 5hrs.
Pre Extubation ABGA showed correction of NaHCO3 level and acidosis.

Pt. was given extubation trial and shifted Reversed and on T piece to ICU on O2 support in view of GCS 7/15 with adequate tidal volume and respiratory efforts present.

Pt. was continued on N.A. Support in ICU and eventually tapered off. Pt. extubated on Post operative day 2 in ICU.

CONCLUSIONS

Treatment of choice is extensive open abdominal surgery to remove the affected tissues called cytoreduction followed by chemotherapy.

Intra operative management primarily depends on the fluid balance in such pts undergoing massive debulking surgeries and the post operative morbidities and mortality will be effected drastically based on the intra operative haemodynamic stability maintained.

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