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## CA-125 Values in Serum, Ascitis & Pleural Effusion in Ovarian Cancer & Confirmation of the Place of CA-125 as a Response Monitoring Tool in Paclitaxel-Based Therapy

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### ABSTRACT

CA 125 has survived various controversies finally securing its place in the mind of clinical oncologist. CA 125 values are tested routinely in the management of Ovarian Carcinoma; however these are exclusively the serum values which are tested. We have studied the CA-125 values in serum as well as in any pleural effusion, ascitis and pelvic collection since NOV 1999 through MAR 2004 among women having epithelial ovaria carcinoma with cytopathological (FNAC/Exfoliative) or-histopathological (core biopsy/operative specimen) evidence. The study population consists of 68 females aged between 29 and 65 years : 65 had pelvic mass with localised pelvic collection, 12 presented with pelvic mass with generalised ascitis, 3 presented with pelvic mass as well as ascitis and pleural effusion. 10 patients presented with only ascitis without any CT / US detectable tumour either in pelvis or in abdomen. Similarly 10 patients had isolated Pleural effusion. 7 patients presented with Ascitis alongwith CT scan or Ultrasound detected peritoneal deposits.

We have found in our study a 2-26 fold higher concentration of CA 125 in such malignant collections compared to their corresponding serum levels (5 to 15 fold increase was found in 60% cases).

The median Serum CA 125 value was 287.5 U/ml (range 120-1142 U/ml) while the median value of such collections was 2675 U/m (range 350-11000 U/ml).

This appears to be a better indicator for the tumour load present in the cavity. A larger study will enlighten the issue further.

All such cases in our study, after assessment of individual case, were candidates for paclitaxel based chemotherapy, either pre-operative or post-operative or in a palliative-intent plan.

Subsequent monthly serial determination in those cases have shown corroborative reduction for a variable duration in their serum and also in any rare residual collection until times preceding progression of disease.

This appears to confirm the inference of PUALSEN T et al that though some in vitro study with paclitaxel on ovarian cancer remarked about modulation and increased secretion of CA 125, questioning its role as a response-assessment adjunct, this does not appear to be any cause of concern in actual in vivo clinical setting when CA 125 is assessed at monthly intervals in ovarian Cancer patients on Paclitaxel based chemotherapy.