
Gestational anemia was often interpreted as "physiological anemia" because of hydropenia in pregnancy. In this investigation we assessed the effect of pregnancy in the iron status to detect whether gestational anemia is "physiological" or iron deficient.

1. Serial observations for serum ferritin were made on two groups of women from early pregnancy to 6 months postpartum. One group did not receive iron (Group A), the other received 800 mg parenteral iron during 2nd trimester (Group B).

2. Serum ferritin concentration in Group A fell to a low level in 2nd and 3rd trimester suggesting that the storage iron was exhausted during pregnancy. Six months after delivery serum ferritin concentration in Group A was still very low indicating the iron loss occurred by pregnancy.

3. Serum ferritin concentration in Group B raised in 2nd trimester owing to "over shoot phenomenon" of parenteral iron administration, but returned to the early value of pregnancy. This suggests that iron supplementation is necessary in pregnancy.

Table. Serum ferritin during pregnancy (ug/1)

<table>
<thead>
<tr>
<th>Date</th>
<th>1st Trim</th>
<th>2nd Trim</th>
<th>3rd Trim</th>
<th>6-month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>42 (10-49)</td>
<td>4 (2-8)</td>
<td>4 (2-61)</td>
<td>4 (4-16)</td>
</tr>
<tr>
<td>Group B</td>
<td>31 (5-55)</td>
<td>31 (10-59)</td>
<td>18 (9-55)</td>
<td>21 (8-54)</td>
</tr>
</tbody>
</table>

log: Mean (-SD)

SERUM FERRITIN VALUE OF PATIENTS WITH CARCINOMA OF OVARY AND UTERUS. N. Yu, F. Kinosita, and M. Kosakutani. Chiba Cancer Center Hospital, Chiba.

Usefulness of examination of ferritin value concerning patients with malignant tumors was evaluated. Ferritin values of 185 patients with malignant diseases including 29 ovarian cancers and 63 uterine cancers were analyzed in regard to their sensitivity as tumor marker. Only in one-third of 63 uterine cancers, abnormal ferritin values were seen, but in a half of 29 ovarian cancers, abnormal values were obtained. Frequency of abnormal values was not in proportion to tumor progress of uterine cancers, but in proportion to progress of ovarian cancers. Markedly elevated ferritin values were seen in the majority of recurrent cases of ovarian cancer. We consider that ferritin value is generally not sensitive tumor marker in uterine cancer and other malignant diseases except some specific diseases such as AML, malignant lymphoma, pancreas cancer etc., but will be an indicator of tumor progress or recurrence in ovarian cancer.

SERUM FERRITIN LEVELS IN PATIENTS WITH CERVICAL CANCER DETERMINED BY TWO METHODS. H. Ito, Y. Ando, Y. Takagi, A. Kubo, S. Hashimoto, and Y. Yasahara. Keio University School of Medicine, and National Tokyo 2nd Hospital, Tokyo.

1. Serum ferritin levels in patients with cervical cancer were determined by RIAg nost and SPAC. In controls, ferritin levels by the former were higher than those by the latter, but correlation between those was significant (r=0.4, p < 0.025).

2. In cervical cancer patients, ferritin levels by two methods were also correlated (r=0.46, p < 0.01). Serum ferritin levels in patients with early cervical cancer were low, and became higher in accordance with advance of disease. This result suggests that determination of serum ferritin levels is not useful to find out early cervical cancer. Relationship between serum ferritin levels and cancer spread parametrial invasion and lymph node metastases or tumor volume was studied in 33 patients who were surgically treated and whose pathological diagnoses were determined.

12 of 15 patients with parametrial invasion and 10 of 14 patients with lymph node metastases had positive ferritin level. A relationship between serum ferritin levels and tumor volume was not clarified. It was not certified by either methods that serum iron levels were correlated with serum ferritin levels.