321

SERUM FERRITIN AND GESTATIONAL ANEMIA. K. Ishikawa,U.Nakashima,D.Hayashi and H.Saito. Nagoya University School of Medicine.Nagoya.

Gestational anemia was often interpreted as "physiological anemia" because of hydremia 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 800mg 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 occured by pregnancy.
3.Serum ferritin concentration in Group B rised in 2nd trimester owing to "over shoot phenomenon" of parenteral iron administration, but returned to the early value of pregnant women in 3rd trimester. This suggests that iron supplementation is necessary in pregnancy.

Table.Serum ferritin during pregnancy(ug/l)

	1st Trim.	2nd Trim.	3rd Trim.	PP 6month
Group A	22(10-49)	4 (2-8)	4 (2-6)	8(4-16)
Group B	13(5-33)	52(30-91)	18(9-35)	21(8-54)

log:Mean(-SD)

322

SERUM FERRITIN(Ft) IN PATIENTS WITH RHEUMATOID ARTHRITIS(RA). T.Shirakura, Y.Sugai, Y.Kawada, S.Kakubari and K.Nakagawa. Gunma University School of Medicine,Branch Hospital and Nippon Radioassay Laboratory. Kusatsu and Takasaki.

Ft was measured by the 2-site-immunoradiometric assay method using SPAC ferritin kit in 25 patients diagnosed as classical and definite RA. Anemia(Hb below 11.0 g/dl) was observed in 8 out of 25 cases(32 %), hypochromia(MCH below 28 pg) in 15 cases(60 %), microcytosis(MCV below 78 μm^3) in 5 cases(20 %), leukocytosis(WBC over 8,000/μl) in10 cases(40 %) and thrombocytosis(Throm. over 35x10 /μl) in 3 cases(12 %). Increase in TIBC and decrease in Tr. saturation were observed in 7 cases(28 %) and 14 cases(56 %), respectively, while hypoferremia(SI below 75 μg/dl) in 18 cases(72 %). Ft values ranged 1.0 to 301 ng/ml in all cases, and the mean was 90±67.3 ng/ml. Thus, Ft were within the normal range(15 to 320 ng/ml) in all but 3 cases. Ft in these cases were below 8.0 ng/ml. Since these showed hypoferremia, increase in TIBC and good response to iron-therapy, it was thought that they were associated with iron deficiency anemia. There was neither significant correlation between Ft values and other various parameters including ESR,MCH,MCV,SI,TIBC and Tr.Sat., nor significant difference of the means of Ft between positive and negative group in CRP or RA test.

323

SERUM FERRITIN VALUE OF PATIENTS WITH CARCINOMA OF OVARY AND UTERUS. M.Yui,F.Kinoshita and M.Koakutsu. 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 ovarial cancers and 63 uterine cancers were analized 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 ovarial 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 ovarial cancers. Markedly elevated ferritin values were seen in the majority of recurrent cases of ovarial cancer. We consider that ferritin value is generally not sensitive tumor marker in uerine 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 ovarial cancer.

324

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

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