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ELEVATED BILIARY CEA LEVELS IN COLORECTAL CANCER PATIENTS: A PROGNOSTIC FACTOR?

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Accurate detection of early liver metastases in colorectal cancer remains a significant clinical problem. Recently it was published that high levels of Carcinoembryonic Antigen (CEA) in bile could be found in patients with liver meta-stases. However, false positive results were found in people with malignant or benign biliary obstruction.
We studied biliary CEA levels in patients with liver metastases detected during follow-up and in patients with primary colorectal cancer. Patients with gall-stone disease were excluded from the study. At laparctomy an ultrasound examination (IOUS) of the liver was performed and a bile sample was taken from the gallbladder.
In a group of 17 patients with liver metastases only, the biliary CEA level was elevated in all but one patient. CEA levels were also studied in a group of 42 patients presenting with a primary colorectal carcinoma. Liver metastases were detected in 12 patients. Only one patient, who had one small metastasis, had a normal biliary CEA level, all others had elevated levels.
In the remaining thirty patients who had no sign of metastases, sixteen patients had an elevated CEA level. If all patients with liver metastases are taken together, a high biliary CEA level was found in 27 of the 29 persons. Whether an elevated biliary CEA level in patients with a negative IOUS indicates the presence of occult liver metastases is yet to be determined.

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PCR RB GENE STUDIES IN HIGH GRADE OSTEOSARCOMAS : COULD IT BE A PROGNOSTIC FACTOR ?

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Introduction : Loss of RB heterozygosity has been observed in more than 50 % secondary osteosarcomas and appears to be particularly frequent in primary osteosarcomas. The aim of this present study was to assess the prognostic value of loss of heterozygosity (LOH) of RB gene in primary osteosarcoma in a retrospective series of 18 patients.

Material and methods : 16 patients were treated according to the Rosen T10 or SIOP OS 87. LOH was analysed by PCR of a polymorphic locus of the exon 20 according to Yandell et al. The materiel studied for each patient was : the diagnostic tumor biopsy, the post chemotherapy tumor excision material and peripheral blood.

Results : germinal RB gene's heterozygocity was evaluable in 17 of 18 patients of the present series. All 17 patients were found to be heterozygous. 10 of 17 (58%) patients showed an acquired LOH at RB locus on tumor specimens.
Patients with no LOH : 4/7 are good responders (gradeIII-IV) and 7/7 are alive in first complete remission. Patients with LOH : 8/9 are bad responders (grade I-II) and 2/8 died from evolutive disease (ED) and 1/8 is alive with ED. 1/9 is good responder (grade III) with ED.

Discussion and conclusion : As all the patients with no LOH are alive in first complete remission and all the patients who experienced a metastatic evolution presented LOH, LOH of RB gene seems to be an early and valuable prognostic factor in osteosarcoma.We are currently, pursuing these studies on a larger number of patients coupling with the studies of mdm 2 gene. All the results will be discussed.

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IMPOPRTANCE OF THE TUMOUR MARKER CA-125 FOR DIAGNOSIS AND THERAPY OF LYMPHANGIO-LEIOMYOMATOSIS.

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Lymphangioleiomyomatosis (LAM) is a rare tumour of the lymphatic system, mostly occurring in women of childbearing age. Apart from manifestation in lymphnodes pulmonary lesions are found, which finally lead to progressive fibrosis of the lung. Diagnostically important are the typical histologic feature, showing proliferation of smooth muscle in the lymphatic sytem, and characteristic CT-scans in case of pulmonary involvement. Due to its rarety diagnosis is mostly made after thorough examination, by which time for early treatment ist lost.
A 17 year old woman, who developed retroperitoneal and mediastinal LAM immediately after her first pregnancy, was treated by two regimens. First LHRH-analogon Goserelin was given for 5 months following radiation of the abdominal tumour mass including the ovaries with 30.2 Gy. During treatment Ca-125 was continuously measured in serum. Initially it was raised with 762 U/ml (normal < 37 /ml). Under treatment Ca-125 continually fell over a period of 21 months. Decrease of Ca-125 preceeded clinical improvement. When reaching partial remission, which could be documented in a 50% decrease of the abdominal tumour, Ca-125 was within normal range. 5 years after diagnosis there is still partial remission and Ca-125 within normal range.
Ca-125 probably is a tumour marker of LAM. In our case there was strong correlation between clinical improvement and decrease of Ca-125. Specifity and sensitivity of Ca-125 need further observation.

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CLINICAL EVALUATION OF THE NEW ELSA-CA125 II ASSAY

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The ELSA-CA125 II (CIS bio international) is a second generation radio-immunoassay for the quantification of CA 125 antigen levels in serum or plasma. In the original ELSA-CA125 assay, the monoclonal antibody OC 125 was used on the solid phase and as the tracer.
The ELSA-CA125 II utilizes M11, a new capture antibody coated on the ELSA solid phase to bind molecules containing OC 125 reactive determinants (T. O'Brien, et al. AM J Obstet Gynecol 1991 ; 165 : 1857-64). OC 125 is used as the radioiodinated tracer. Analytical performances of ELSA-CA125 II are superior to ELSA-CA125 assay (M. Grimaux, et al. Recueil des résumés du colloque CORATA. IXe Colloque CORATA. Marseille ; 1992 : 135).
We evaluated the clinical performances of ELSA-CA125 II by a multicenter study. In a healthy (n=289) and in a benign gynaecological diseases (n=149) populations specificity is respectively 97.2% and 75% at the established cut-off 35 U/ml. We confirmed an elevation of CA125 during menstruation and the first quarter of pregnancy. In a non gynaecological benign diseases group (n=82), pleural effusions, hepatitis, cirrhosis, pericarditis and renal failure induced a non specific elevation of CA125.
Using the 35 U/ml cut-off, among major epithelial histological types (n=109), sensitivities was found to be 85% in serous tumors (n=69), 41% in mucinous tumors (n=17) and 83% in other types (n=23). The ELSA-CA125 II was found to have a poor sensitivity in non ovarian cancers. During follow-up of patients with serous ovarian cancers, we observed an equivalent behaviour of both assays with the clinical evolution.
In conclusion, this multicenter study confirmed the equivalent clinical performance of ELSA-CA125II with the original ELSA-CA125 test.

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CAN A SINGLE SERUM TEST PROVIDE SIMILAR OR EVEN SUPERIOR DIAGNOSTIC INFORMATION THAN TOTAL BODY CT, OR ANTI-CEA PLANAR AND SPECT IMMUNOSCINTIGRAPHY? Value of measuring Tissue Polypetide Antigen (TPA) in the preoperative evaluation of lung cancer.

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Because of the difficulty in interpreting abnormal values of TPA in the context of an apparently limited LC, we calculated values of sensitivity, specificity, accuracy, and predictive capability for more levels of TPA and compared them with more "orthodox" staging methods. We classified 49 consecutive operated LC patients either clinically (i.e., by history and physical examination, routine laboratory tests, chest-x-rays, bronchoscopy, plus any additional test as indicated), or by CT, or by total body planar anti-CEA IS, or by the same IS supplemented by SPECT images of the thorax, or by the serum TPA concentration. The cutoffs points of 90,120,140,160 U/L were selected to separate 5 TPA stages. Both TPA assays and CT/IS readings were blind of any clinical information. Sensitivity, specificity, and accuracy for full operability (stages 1 and 2) and full inoperability (stages 3b and 4) of the 5 techniques onto study (pathological reference) were as follows:

STAGES	clinical	CT	ISplanar	IS-SPECT	TPA
sensitivity (%):	89	63	70	65	83
specificity (%):	53	53	47	74	41
accuracy (%):	74	59	61	69	65

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SERUM PROTEINS AND LUNG CANCER PROGNOSIS.

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Several factors are known as important determinants of the prognosis of lung cancer (LC). Multivariate equations, containing multiple prognostic factors, are strongly predictive of the outcome, and yet they can only predict a scarce 50% of the natural variability. It follows that a myriad of other less important factors remain unknown. We studied 367 consecutive patients, seen for a new lung cancer during the last 4 years, by measuring the serum concentration of total proteins (TP), albumin (A), immunoglobulins (IgG,IgM,IgA), transferrin (T), haptoglobin (HP), alpha1-glycoprotein acid (GA), and alpha1-antitrypsin (AT). In 291 of them, all measurements, in addition to values of other 36 variables of various type were available. Univariate analyses showed that patients with transferrin above 218 mg/dl had a median survival of 9.4 months (95% confidence interval ,C.I.: 7-13.5), as compared to 7 months of the remaining subjects (C.I.:4.9-7.5, p<0.01); while patients with AT above 300 mg/dl survived significantly less than patients with low AT (9.5 months vs. 6.45, p<001). High HP and GA were also associated with a poor prognosis (p around 0.05). A multivariate survival analysis (Cox model), including 291 cases and 41 variables selected as significant: 1.stage of disease; 2. PS; 3. weight loss; 4. AT; 5. brain metastasis; 6. T-factor; and 7. transferrin.