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RESULTS TO 5 YEARS AFTER ENDOVENOUS LASER TREATMENT

Giuseppe Botta, Sergio Mancini

University of Siena, Department of General Surgery, Center of Research, Therapy and Rehabilitation Phlebolympological.

Introduction: To refer and to discuss the appearance of recurrent varicose veins after many years from the endovenous laser treatment of the reflux saphenous axis.

Patients and methods: 191 laser procedures have been carried out in the period between December 2001 and June 2009 at the Center of Phlebolympology of the Siena University for the treatment of 188 patients with varicose veins of the lower limbs. 145 patients are females and 46 males, ranging in age between 22 and 80 years. The superficial chronic venous insufficiency was caused by the incompetence of the saphenofemoral junction (SFJ) and the reflux of the great saphenous vein (GSV), as demonstrated by duplex scanner. All patients were operated under local anesthesia and sonographic guidance. A diode laser of 810 nm has been used in the first 71 procedures and a diode laser of 980 nm in the fol-

lowing 120 procedures. The fiber laser is introduced for transcutaneous way or after small surgical cutaneous incision from the bottom to the top with the tip that arrives to 2 cm from the saphenofemoral junction, in way to leave effluent the epigastrica vein. The employed parameters have been 12-14 watt of power with 3 impulses of 1 second according to repeated after an interval of 1 second every cm of length of the vein, thus to obtain a fluence of approximately 40 joule for cm.

Results: The immediate obliteration of the saphenous axis has been had in 182 cases (95%). The ricanalization of the great saphenous vein has been documented in the instrumental follow up in 11 patients (10,2%) at 3 years from the treatment, in 9 (12%) at 4 years and in 9 (25,7%) after 5 years.

Conclusion: The endovenous laser treatment for the therapy of varicose veins of the lower limbs is a simple procedure, poor invasive, that it can be performed in outpatient or Day Surgery regime without increase of the costs of stay in hospital. Its effectiveness currently is put in argument from the possibility that a recurrent varicose veins appears at distance of years from the treatment with ricanalization of the saphenous axis, even if in absence of symptomatology. In our experience this possibility has evidenced in the clinical and instrumental follow up of the patients operated after 5 years in a percentage that exceeds the 20%.

MPSTEG-COLOR:

A NEW STEGANOGRAPHY IN THE PIXEL DOMAIN

Giacomo Cancelli

The main goal of any steganographic algorithm is that of hiding a message within an innocuous signal in such a way that the very presence of the hidden message remains secret. The opposite effort of determining the presence of a hidden message within a cover signal is carried out by steganalyzer programs. Blind steganalyzers do not know the steganographic technique used to hide the message, hence they rely on a statistical analysis to understand whether a given signal contains hidden data or not, however this analysis disregards the semantic content of the cover signal. Given the observation above, it may be argued that, from a steganographic point of view it is preferable to embed the watermark at higher semantic levels, e.g. by modifying structural elements of the host signal like lines, edges or flat areas in the case of still images.

In this work we presented a new steganographic algorithm for color images (MPSteg-color). It is based on Matching Pursuit (MP) decomposition of the host image. The idea behind this work is to adaptively choose the elements of a redundant basis to represent the host image. In this way, the image is expressed as the composition of a set of structured elements resembling basic image structures such as lines, corners, and flat regions. We argue that embedding the secret message at this, more semantic, level results in a lower modification of the low-level statistical properties of the image, and hence in a lower detectability of the presence of the hidden message. The results confirm the validity of the proposed approach.

LUMBAR SPINAL CHRONIC EPIDURAL HEMATOMAS. A RARE PATHOLOGY, OFTEN UNDERESTIMATED

G.B. Scarfò, F. Natrella

Objective. The authors, reporting 3 cases operated on in the last 2 years, describe the clinical and radiological features of a relatively very rare pathology or complication, which is part of the elaborated universe of the degenerative lumbar spinal disease. By pointing out the probable etiology, they suggest the most appropriate treatment. **Patients and methods.** We report 3 cases of lumbar spinal chronic epidural hematomas. The patients, all males aged from 65 to 38, presented with an irritative pluriradiculopathy, low back pain, neurological deficits and intermittent claudication. All patients underwent X-ray, CT and MRI that showed the hematomas to be associated with a significant spinal degenerative disease and disk herniation. They have been operated on with a microsurgical technique and stabilized by intersomatic titanium cages. **Results.** The outcome, in a 6 months-2 years follow-up, was excellent. All the symptoms and neurological deficits disappeared. **Conclusions.** Lumbar spinal chronic epidural hematoma is hard to pre-surgically diagnose and infrequently reported with clarity by radiologists. Nevertheless, it is a pathology with precise radiological and histological features, and its etiology derived from a spontaneous, iatrogenic or traumatic bleeding, which is always venous.

*Annual scientific meeting July 10 2009***CONJUGATED BRANCHED PEPTIDES AS TARGETING AGENTS FOR TUMOR IMAGING AND THERAPY**

Jlenia Brunetti, Alessandra Cappelli, Chiara Falciani, Barbara Lelli, Niccolò Ravenni, Alessandro Pini and Luisa Bracci

University of Siena, Department of Molecular Biology.

Membrane receptors for endogenous peptides like Somatostatin, Neurotensin, Bombesin and many others, are over-expressed in different human cancers and might be targeted as tumor-specific antigens. Efficiency of peptide-receptor targeting depends on the presence and concentration of receptors on neoplastic tissues. Our goal is producing peptide molecules that can be used for both a specific receptor-tracing test and for therapy or in vivo imaging, by delivering radio or chemotherapeutic moieties to the same receptors on tumor cells. We previously demonstrated that peptides synthesized in a branched form known as Multiple Antigen Peptides (MAP) can retain biological activity and become extremely resistant to endogenous proteases and peptidases (1). An important possible development of protease-resistant MAPs, is the application to tumor therapy and in vivo imaging. Ana-

logues of neurotensin (NT) and its functional fragment NT(8-13) are under investigation to target a variety of human tumors overexpressing NT receptors. We demonstrated that the tetra-branched MAP form of NT and NT(8-13), fully retain their biological activity and become much more resistant to proteases (1). NT oligo-branched peptides are therefore candidates for the development of new specific tumor-targeted biomolecules. In the present work, different NT analogues were synthesised as tetra-branched MAPs, where the NT sequences behave as the tumor targeting moiety, while functional units for treatment or tracing are bound at the C-terminus of the molecule. Tetra-branched NT conjugated to fluorophores were synthesized and tested for receptor binding on different human tumor cell lines.

Once verified that the conjugation of the branched peptide did not reduce its ability to bind the receptor, we tested our peptides on samples from surgical resection of colon and pancreas adenocarcinoma, in comparison with healthy tissues from the same patients. Confocal images show a general good staining by branched NT peptides in most tumor samples and a much lower staining in healthy tissue from the same patients, indicating a good selectivity of the peptide. The same tetra-branched peptide was conjugated to chemotherapeutic drugs and tested for cytotoxicity toward tumor cells in vitro and in animal models. Results indicate promising features of branched NT for selective tumor targeting.

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**CASE REPORT: RECIDIVA PELVICA
DI ETP RETTO CON INFILTRAZIONE URETERALE,
TRATTAMENTO E FOLLOW-UP.**

Marzocca G., Lo Gatto M., Varrone F.

Dipartimento di Chirurgia Generale e Specialità Chirurgiche. Azienda Ospedaliera Universitaria Santa Maria alle Scotte, Siena.

Introduction: The authors present the clinical case of a woman subjected to anterior resection of the rectum with recurrence involving the pelvic the right ureter occurred after about 8 years from surgery.

Patients and methods: M.R. woman of 79 years, came to our observation for pain type sciatica. The patient has a history of resection front of the rectum for adenocarcinoma (T3N1Mx, G2) carried out 8 years first with 5-year follow-up negative for recurrent disease.

The Rx lumbosacral spine was negative, while the ultrasound of the abdomen showed an hydronephrosis second degree dependent on the right kidney. Yes therefore performs a CT abdomen demonstrating "a level sacral promontory a solid education with a diameter of 30 mm, inhomogeneous density for nodular calcification, which is located between the common iliac arteries and infiltration of the right ureter,

which appears stenosis, upstream of the stenosis, there are signs of uretero-hydronephrosis. Outcomes of resection of the rectum without evidence of loco-regional recurrence or of iliac lymphadenopathy. The tumor markers are in normal limits. Assuming a radical treatment you Exploratory laparotomy: for the small pelvis is a neof ormation of about 5 cm in diameter invading the distal right ureter and ileal loop. Proceed to resection stretch of ureter infiltrated by the tumor and practiced direct suture catheter type on pig-tail. Also practiced resection involved in the neoplastic process of the loop ileal. Not possible remove the entire tumor infiltrating the plan because sacral. The post-operative care is regular, the patient is resigned in XII postoperative day. Histopathological examination identifies the lesion as relapse of adenocarcinoma of the large intestine.

Results: The follow-up at 12 months is negative for disease progression.

Conclusion: Colorectal tumors in advanced stage (upper stage C2, III) even after treatment of resection and adjuvant chemotherapy regional recurrences may spot the medium to long term no increase in common biohumoral Markes. These recurrences may affect the urinary system requiring treatment diligent in order to prevent permanent kidney damage. Strategies therapeutic present in a clinical setting and in the literature are numerous and vary depending on the extension of recidivism. They range from simple derivatives contracts (nephropielostomy), the resection-anastomosis of ureter involved, the en bloc resection recurrence of the mass, the debulking, the pelvic exenteratio.

Key Words: relapse FTE rectum, ureter infiltration.