

therapeutic features of a rare case of cystic dystrophy of the duodenal wall associated with a pancreatic cystadenoma.

**Case Report:** A 44 years-old man was admitted in the gastroenterology unit of our University Hospital with epigastric recurrent pain and weight loss. A CT and a MR revealed an inhomogeneous thickening of the duodenal wall by multiple, coarse and septate cysts compressing common bile duct, Wirsung and duodenal lumen. To reach a differentiated exploration of pancreatic and duodenal areas, we performed a radial EUS showing:

thickening of the duodenal wall with multiple, intramural cysts arising from the third layer of the wall; enlargement of pancreatic head, with a small cystic lesion with an own wall;

We diagnosed a cystic dystrophy of duodenal wall associated with chronic pancreatitis and pancreatic cystic neoplasm. The patient underwent duodenopancreatectomy and was discharged after 14 days without postoperative complications.

**Discussion:** Cystic dystrophy in heterotopic pancreas is a rare condition with signs of upper digestive obstruction, sometimes with jaundice or signs of acute pancreatitis. CT and MR are useful in demonstrating the presence of cysts in a thickened duodenal wall but mainly EUS is able to reach a correct diagnosis. The choice of different therapeutic options is still debated: pancreaticoduodenectomy is proposed for symptomatic patients; however some authors have proposed medical approach using octreotide or endoscopic treatment for selected patients.

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### Primary Duodenal Epithelioid Angiosarcoma: Case Report

*G. Diamantis, L. Magno, A. Pascariello, M. Inzirillo, A. Pastore, G. Galloro*

Dip. di Chirurgia Generale, Geriatrica, Oncologica e Tecnologie avanzate – Area di endoscopia digestiva operativa. AUP Federico II

**Introduction:** Angiosarcomas are uncommon malignant tumor of vascular endothelium that represents less than 1% of all sarcomas. Angiosarcoma of gastrointestinal tract are exceptionally rare, they can arise in the esophagus, stomach, small intestine, appendix, colon and rectum. We here describe a rare case of primary duodenal epithelioid angiosarcoma.

**Case Report:** In July 2003, a 30-year-old white male, with a background history of anemia, was admitted in Gastroenterology Unit of our University Hospital presenting melena. An upper gastrointestinal endoscopy was urgently performed, showing a sessile polypoid lesion (about 1 cm diameter) in the third part of the duodenum, with irregular surface and a red-purple colour. Two days later a new UGE with polypectomy was performed. The histological examination revealed a malignant tumor with destructive pattern, ulcerating the surface epithelium. It was composed of epithelioid cells with round to oval nuclei and huge nucleoli. The cells were prevalently arranged in a solid pattern, featuring an epithelial growth. Immunohistochemically the neoplastic cells were strongly positive for CD31 Factor VIII, and vimentin, and they were focally positive for keratin.

**Discussion:** Angiosarcoma of the gastrointestinal tract are exceptionally rare, with only a few case reports in the literature.

Gastrointestinal involvement can be primary or secondary to direct extension from intraabdominal ‘angiosarcomatosis’ or from a retroperitoneal disease, or metastatic. Primary Intestinal angiosarcoma usually presents with gastrointestinal bleeding and anemia. Endoscopy is often performed to identify the source of bleeding. The variant so-called epithelioid angiosarcoma, as in our case, that express also keratin, may make problematic the distinction from a carcinoma.

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### A New Endoscopic Treatment for Pancreatic Fistula after Distal Pancreatectomy: Case Report and Review of the Literature

*A. Romano, M. Spaggiari, M. Masetti, R. Sassatelli, F. Di Benedetto, N. De Ruvo, R. Montalti, G. Arzu, G. Guerrini, R. Ballarin, M.G. De Blasiis, S. Di Sandro, N. Smerieri, G. Rompianesi, G.E. Gerunda*

Centro trapianti fegato e multiviscerale, Modena

**Introduction:** Despite surgical and medical improvements allowed a progressive decrease of morbidity and mortality linked to distal pancreatectomy over the last few decades, pancreatic fistula remains the single most common complication that influences the patient’s clinical outcome and length of hospital stay. Several techniques have been proposed to prevent its development, but in the end minimally invasive procedures are highly desirable to shorten the fistula closure time with minimal risks for the patient. We performed endoscopic embolization of the duct by filling the leakage with glue to treat a relapsing pancreatic fistula in a patient undergoing distal pancreatectomy for cancer of the pancreatic body.

**Case Report:** A 69 year-old woman had a postoperative pancreatic fistula after distal pancreatectomy for a pancreatic tail metastasis of colon cancer. As the pancreatic fistula did not heal by using conventional treatments, on POD 38 pancreatic fistula sealing was performed. A mixture of Glubran 2® (N-butyl-2-cyanoacrylate combined with methacryloxysulpholane by GEM, Viareggio, Italy) and iodinated lipid compound at a proportion of 0.5 ml to 0.3 ml was injected. The injection of the glue mixture was immediately followed by an injection of distilled sterile water, in order to fill the dead space volume and deliver the glue mixture into the fistula. Following cannulation of the main pancreatic duct with a guidewire confirmed a complete occlusion of the distal pancreatic duct. An associated pancreatic stent (4-cm 7F) was placed at the end of the procedure. As a result, the pancreatic fistula was sealed successfully and the patient was discharged on POD 45. An abdominal CT scan performed 6 months after showed a complete resolution.

**Discussion:** The management of a pancreatic fistula after distal pancreatectomy remains a big challenge. Despite the high rate of success (70%), non-operative non-endoscopic treatment requires several weeks for spontaneous closure and a very long hospital stay. On the other hand, the surgical option in the early postoperative period has a success rate >80% but increased mortality risk (between 23% and 63%). In the last few years endoscopic treatment of post distal pancreatectomy fistula has had effective results in 75% of patients. In refractory cases, endoscopic pancreatic fistula sealing is performed with two different kinds of glue: fibrin glue and cyanoacrylate. The

first is a physiological adhesive but is highly perishable when exposed to pancreatic juice, the second is a non-biological glue but can promote inflammatory reactions and most serious, embolic episodes. We present the first case of successful pancreatic fistula embolization with Glubran 2<sup>®</sup>, a modified preparation of N-butyl-2-cyanoacrylate combined with methacryloxysulpholane, which has shown to have less cytotoxicity and to induce a less severe inflammatory reaction. This procedure may be appropriate in some carefully selected patients if performed by expert endoscopists in a tertiary center. It has a few risks – compared to surgery; it does not require periodic treatment – as fibrin glue does; and it reduces the hospital stay, with beneficial effects for the patient and cost savings.

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## Phlebology

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### Scleroembolization of the Left Spermatic Vein by Sandwich Technique

*D. Cecere, P. Valitutti*

Chirurgia Vascolare, Agropoli

**Introduction:** Our relative experience to the endovascular treatment of male varicocele by scleroembolization of the left spermatic vein by sandwich technique.

**Materials and Methods:** 72 male patients aged between 17 and 42 years (average age 25.7 years) with left varicocele underwent clinical assessment, Doppler ultrasonography, testing of free and total serum testosterone, LH and FSH gonadotropins and spermogram. In 58 cases selective phlebography of the left spermatic vein was performed with a right inguinal access. 52 patients underwent endovascular treatment of scleroembolization of the left spermatic vein. In 6 cases Polidocanol (Aetoxysclerol) 3%, in 8 cases Gianturco coils and in 38 cases two Gianturco coils (1 below the inguinal ligament and 1 to III superior of the left spermatic vein) and Polidocanol (Aetoxysclerol) 3% by sandwich technique were used.

**Results:** Immediate technical success was achieved in the 52 patients. At the 6 and 12 months follow-up they underwent Doppler ultrasonography and spermogram. In 48/52 (92.3%) patients showed complete resolution of varicocele whereas 4/52 (7.7%) patients had only partial disengagement of the pampiniform plexus. In the 52 patients the spermogram showed a significant increase in sperm concentration and the motility of the spermatozoa with negligible morphological changes. 3 (5.8%) patients showed partial relapsing of the varicocele: 2 (3.9%) patients underwent scleroembolization by only Polidocanol (Aetoxysclerol) 3% and 1 (1.9%) patients underwent embolization by only Gianturco coils.

**Discussion:** The endovascular treatment of the varicocele is reliable, effective, minimally invasive and economically viable technique that can be performed on an outpatient basis and above all to eliminate the venous spermatic reflux and improve seminal parameters.

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### Treatment of Venous Ulcers: CHIVA vs. Compression Therapy

*F. Tovecci, R. Compagna, P. Sorrentino, K.A. Markaboui, A. Bellino, B. Amato*

Department of General Surgery, University 'Federico II' Naples, Chairman: Prof. G. Perisco

**Introduction:** In industrialized society the risk to develop a venous ulcer is very high and it continues to increase. Usually there are two kinds of treatment:

- Venous surgery
- Compression therapy

This study compares both techniques in patients with venous leg ulcers.

**Methods:** 60 patients with 68 venous leg ulcers have been selected and if they presented bilateral ulcers, each one was considered separately. We adopted some exclusion criteria:

1. Age >70 years
2. Incapacity to walk
3. Ulcer extension <1.5 cm or >10 cm
4. Diabetes
5. Arterial and venous disease

Our patients were divided in two groups and we treated them separately.

**Results:** The most significant check-up was effectuated 2 years later and it showed that with CHIVA treatment healing was 99% and 95% with compression therapy. About relapses, the study shows a higher rate in the compression group.

**Discussion:** It's evident that the surgical treatment has much more success for leg ulceration than compression therapy.

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### Association Between Recurrent Varicose Veins and Incompetent Perforating Veins: Our Experience

*P. Sorrentino, D. De Vito, V. Piscitelli, R. Compagna, V. Di Maio, F. Tovecci, B. Amato*

Department of General Surgery, University 'Federico II' Naples, Chairman: Prof. Giovanni Persico

**Introduction:** The aim was to investigate the association between the presence of incompetent perforating veins and development of recurrent varicose veins.

**Methods:** A consecutive group of patients presenting with varicose veins were examined using colour duplex ultrasonography. Pathological perforating veins were defined as those exhibiting bidirectional flow and a diameter of 4 mm or greater at the fascia.

**Results:** Between September 2005 and October 2006, 224 patients were examined. Primary varicose veins were found in 246 legs (165 patients) and recurrent varicose veins in 84 legs (59 patients). In patients with primary varicose veins, 108 (44%) had incompetent perforators compared to 53 (63%) of those with recurrent varicose veins. Also, for recurrent varicose veins, the percentage of patients with any