Volume 67 | Supplement 4 | 2021

ACTA MARISIENSIS
SERIA MEDICA

OFFICIAL PUBLICATION OF THE
GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE, AND TECHNOLOGY OF TARGU MURES

# INSIDE MEDICAL CONGRESS 2021

21-24 October 2021

Targu Mures, Romania

## BOOK OF ABSTRACTS

ISSN: 2668-7755 • Online ISSN: 2668-7763 • www.actamedicamarisiensis.ro

UNIVERSITY PRESS
19 99
TÂRGU-MUREŞ

**Acta Marisiensis - Seria Medica**

Volume 67 | Supplement 4 | 2021

# INSIDE MEDICAL CONGRESS 2021

21-24 October 2021
Targu Mures, Romania

# BOOK OF ABSTRACTS

# Acta Marisiensis - Seria Medica




*Acta Marisiensis* - Seria Medica (ISSN 2668-7755) is the official publication of the George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures, being published by University Press, Targu Mures.


The journal publishes high-quality articles on various subjects related to research and medical practice from the all the medical and pharmaceutical fields, ranging from basic to clinical research and corresponding to different article types such as: reviews, original articles, case reports, case series, letter to editor or brief reports. The journal also publishes short information or editorial notes in relation to different aspects of the medical and academic life.

**Information for contributors**

Manuscripts must be submitted via editorial manager system, available online at **www.editorialmanager.com/amma**

**Correspondence**


All correspondence should be addressed to the Editorial Office:
Acta Medica Marisiensis
George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures
38, Gh. Marinescu St, 540139 Tîrgu Mureş, Romania
**Managing Editor** Professor Adrian Man
or sent by e-mail to ammjournal@umfst.ro





**Acta Marisiensis - Seria Medica** is indexed in the following international databases:

· Celdes
· CNKI Scholar
· CNPIEC
· EBSCO Discovery Service (since 01 July 2010, first indexed number - no.4/2010)
· Google Scholar
· J-Gate
· Primo Central (ExLibris)
· ReadCube
· Summon (Serials Solutions/ProQuest)
· TDOne (TDNet)
· WorldCat (OCLC)

**DTP and Website Management**
Editura Prisma





This journal is printed on environmentally-friendly ECF (elemental chlorine free) woodfree paper.

## INSIDE MEDICAL CONGRESS 2021

**21-24 October 2021 Targu Mures, Romania**
**The Society for Innovation, Development and Medical Education – SideMED -**
**George Emil Palade University Of Medicine, Pharmacy, Science, and Technology of Targu Mures**

### Organizing Committee

Dr. Eduard Costin Argatu

Dr. Patricia Carmen Chișcariu

Andreea Georgiana Comșulea

Alexandra Ioana Luca

Paula Bândea

Andreea Micu

Iuliana Comșulea

Diana Sabău

Bogdan Ion

Maria Louise Fufezan

Mara-Constantina Ilovan

Maria Constantin

Maria Simion

Prof. Dr. Adrian Man - Managing Editor

Assoc. Prof. Dr. Valentin Nădășan - Technical Editor

### Scientific Committee

Dr. Eduard Costin Argatu

Dr. Patricia Carmen Chișcariu

Andreea Georgiana Comșulea

Alexandra Ioana Luca

### Peer-Reviewers

Prof. Dr. Călin Molnar

Assist. Prof. Dr. Amalia Făgărășan

Assist. Prof. Dr. Anca Negovan

Lect. Dr. Claudiu Molnar

Lect. Dr. Daniel Gheorghe Popa

Lect. Dr. Luminița Decean

Lect. Dr. Rareș Chinezu

Lect. Dr. Veronica Ghirca

## USE OF MINIMAL EMERGENCY PLEUROTOMY – COMPARATIVE STUDY 2019 VS 2020

Sergiu-Ștefan Laszlo[1], Dragoș-Călin Molnar[1], Emilia Găitan[1], Marian Botoncea[1], Călin Molnar[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** The role of pleural drainage is to evacuate fluid or air in a closed suction system, with the role of restoring negative intrathoracic pressure and preventing complications.

**Objective:** The aim of this study is the comparative analysis of the usage of this procedure in the pre-pandemic and in the pandemic period.

**Material and methods:** Retrospective study by comparative analysis of skeletal traumatic injuries in 2019 vs 2020.

**Results:** Out of a total number of 998 traumas, 59 required emergency pleurotomy. Out of 59, 9 are female, 50 are male. Out of 58, 24 presented pneumothorax (21-2019, 3-2020), and 12 hemothorax (10-2019, 2-2020). Costal fractures presented 13 patients (10 - 2019, 3 - 2020). The number of injuries resulting from road accidents is 10 (10-2019, 0-2020). The hospitalization period of patients is between 6 and 18 days.

**Conclusions:** The number of chest injuries requiring emergency pleurotomy has decreased visibly during the pandemic compared to the pre-pandemic period. Pleurotomy remains a life-saving surgical procedure.

**Keywords:** Emergency pleurotomy, Skeletal traumatic injuries

---

## THE IMPORTANCE OF EMBRYOLOGY IN CLINICAL PRACTICE

Bianca-Teofana Țuțeanu[1], Maria-Larisa Cornea-Cosma[1], Maria-Teodora Constantin[1], Remus-Sebastian Șipoș[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** The embryological development of the kidney comprises three stages. The pronephros appears in the tenth stage, in the cervical region of the embryo, while the mesonephros develops inferior to the pronephros in resorption and acts as a temporary kidney until the final kidney develops. The mesonephros has an excretory canal called the mesonephric duct or Wolffian duct, located posterolaterally. The metanephros represents the final kidney, formed from two sources: the caudal part of the mesonephric duct and the metanephrogenic buds.

**Objective:** The aim of this presentation is to demonstrate the correlations between embryological development of the kidney and its clinical anatomy.

**Material and methods:** We approached the case of a 40-year-old patient who presented to the ER, initially for other medical problems, but after all the necessary examinations, the CT revealed an anatomical variation, more specifically the vascularization of the left kidney from the corresponding internal iliac artery.

**Results:** Renal ectopy defines the abnormal position of the kidney. The pelvic kidney is an ectopia that describes any kidney located below the normal place. It is an anomaly of “ascension” of the metanephros. Our case presents a patient with a kidney located in the pelvic region and irrigated by the internal iliac artery, instead of the renal artery, without other complications related to this abnormality.

**Conclusions:** Anatomical variations can be a challenge for the clinician, and knowledge of the clinical embryology notions can alleviate an intraoperative “surprise” that may occur, especially in emergency interventions. From a clinical point of view, the detection of such a location of the kidney, in a routine ultrasound, raises suspicions of ectopia or renal ptosis, which requires a differential diagnosis.

**Keywords:** renal ectopy, pelvic kidney, embryological development

## THE BENEFITS OF SUBCHONDROPLASTY IN BONE MARROW LESIONS TREATMENT

Sergiu Ciurean[1], Iulia-Maria Lupu[1], Ciprian-Gelu Grigoroaea[1], Fodor Pal[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** The osteochondral unit consisting of cartilage and a subchondral unit is responsible for absorbing shock and mechanically supporting the joint. Thus, a bone marrow lesion (BML) that occurs in the subchondral bone can eventually lead to rapid bone deterioration.

**Objective:** This case presentation aims to emphasize the importance of surgical interventions to avoid possible knee osteoarthritis.

**Material and methods:** A 51-year-old man previously treated with knee pain presented once again with a limited range of motion of the joint, precisely an arc of 15-90. Moreover, the patient had a Kellgren-Lawrence grade 2 osteoarthritis and the subchondral bone marrow of the medial femoral condyle had shown significant alterations during the MRI examination. These findings along with other tests pointing towards osteochondral deterioration formed the basis of the diagnosis, a bone marrow lesion. Due to the ineffectiveness of the conservative treatment, the patient had gone through, a surgical approach had been taken into consideration. Arthroscopy and subchondroplasty were performed under general anesthesia. A grade II ICRS cartilage lesion was located at the medial femoral condyle. The surgeons, therefore, opted for a debridement chondroplasty to remove the loose cartilage fragments. During the intervention, the trajectory of the guidewire was predetermined by MRI and an orthogonal fluoroscopic view was made to place the cannula. Ultimately, a purely synthetic bone graft substitute was injected into the lesion.

**Results:** The International Knee Documentation Committee score had an overall improvement starting from 39.9 to 66.7 at six months and 87.4 at one year. Both the Knee Injury and Osteoarthritis Outcome Score and the Tegner Lysholm score showed a significant increase at the six and twelve-month follow-up.

**Conclusions:** Subchondroplasty with a small rate of complications is less invasive and, hence, a considerable surgical approach when treating BMLs.

**Keywords:** subchondroplasty, osteoarthritis, arthroscopy, condyle

---

## SURGICAL TREATMENT OF CHONDROPATHY USING THE AUTOLOGOUS MATRIX-INDUCED CHONDROGENESIS TECHNIQUE

Sergiu Ciurean[1], Iulia-Maria Lupu[1], Bogdan-Vasile Gherghel[1], Fodor Pal[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Autologous matrix-induced chondrogenesis (AMIC) is a one-step surgical procedure that consists of a subchondral microfracture surgery done alongside an installment of a collagen I/III membrane using partially autologous fibrin glue. This technique is considered to be a further development in cartilage resurfacing since it allows mesenchymal stem cells (MSCs) to develop into chondrocytes.

**Objective:** The objective of this case presentation is to emphasize the benefits AMIC has when it comes to the structural and functional restoration of the cartilaginous tissue.

**Material and methods:** We present a case of a 42 years old male admitted into the Orthopaedic ward with knee pain, tumefaction, and an impediment to the extension and the flexion of the joint. After the radiological exam, the patient was diagnosed with chondropathy of the internal femoral condyle and femoral trochlea. The intervention begins with an exploratory knee arthroscopy which confirmes the diagnosis and places it into stage II ICRS chondropathy of the femoral condyle and stage IV ICRS chondropathy of the femoral trochlea. Furthermore, the surgery continues with knee arthrotomy followed by the exposure of the chondral defect and the cartilage debridement. Afterward, a piece of Maioregen matrix is cut and placed onto the debrided space followed by a suture. The same method is used in the case of the femoral trochlea.

**Results:** Compared to other interventions for chondropathy, this technique using the Maioregen matrix provides a one-step surgery with better clinical results and the complete healing of the knee between 6-8 weeks postoperatively.

**Conclusions:** Autologous matrix-induced chondrogenesis being based on forming chondrocytes is considered to be an easier and safer treatment of knee chondropathy. Consequently, it is a highly used surgical procedure that has great records taking into consideration patient follow-up as well.

**Keywords:** AMIC, Maioregen, chondropathy, stem cells

## PROGRESSIVE PREOPERATIVE PNEUMOPERITONEUM

Mihai Toma[1,2], Valentin Oprea[2], Cosmin Nicolescu[1,3], Adrian Pavel[4], Hunor Kovacs[3], Călin Molnar[1,3]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures
2. Clinical Department of Surgery - Military Emergency Clinical Hospital "Dr. Constantin Papilian" Cluj-Napoca
3. 1st Clinical Department of Surgery - County Emergency Clinical Hospital Targu Mures
4. Clinical Department of Radiology - Military Emergency Clinical Hospital "Dr. Constantin Papilian" Cluj-Napoca

**Background:** Progressive preoperative pneumoperitoneum (PPP) is a method of abdominal wall augmentation, which is important in ventral hernia with large defect or loss of domain. Since first use in 1947 by Goni Moreno, this technique gaining more and more popularity among parietal surgeons.

**Objectives:** The goal of this scientific work is to raise awareness among parietal surgeons on the benefits of preparing the abdominal wall with pneumoperitoneum, based on international consensus, analyzing indications, advantages and complications.

**Material and methods:** Progressive preoperative pneumoperitoneum was used in large hernia or loss of domain quantified 1175 cases, included in 28 studies since 1st January 1940 until 31 may 2019. Were analyzed indications, advantages and procedural complications.

**Results:** PPP is recommended to be used in large hernia, irreducible hernia or loss of domain, indication given by CT scan, with Tanaka Score >25% and transverse diameter >10cm. For creating PPP is indicated to use a central venous catheter introduced in Palmer's point. PPP is achieved by introducing 600-1300 $cm^3$ ambient air daily for 2 weeks. The most common complications are shoulder pain, subcutaneous emphysema and abdominal pain. A series of advantages are pneumatic adhesiolysis, increases muscle length (6-9 cm), spontaneous reduction of mass and gradual and physiological adaptation at mass reduction.

**Conclusions:** In conclusion, PPP is relatively a safe method of augmentation in abdominal wall reconstruction, inexpensive, easy to perform, with low percentage of complications and demonstrated series of advantages. It is beneficial for surgeons to be aware of the importance of abdominal wall augmentation in reconstruction to reduce postoperative complications and to ensure the success of operations.

**Keywords:** pneumoperitoneum, indication, complications, advantages, augmentation

---

## LOSS OF DOMAIN. ABDOMINAL WALL RECONSTRUCTION – EASY TASK?

Mihai Toma[1,2], Călin Molnar[1,3], Adrian Pavel[4], Hunor Kovacs[3], Dragoș Călin Molnar[1], Valentin Oprea[2]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures
2. Clinical Department of Surgery - Military Emergency Clinical Hospital "Dr. Constantin Papilian" Cluj-Napoca
3. 1st Clinical Department of Surgery - County Emergency Clinical Hospital Targu Mures
4. Clinical Department of Radiology - Military Emergency Clinical Hospital "Dr. Constantin Papilian" Cluj-Napoca

**Background:** Loss of domain represents a ventral abdominal wall defect, where reduction of contents and fascial closure can't be achieved without augmentation technique or high risk of complications (increased intra-abdominal pressure).

**Objective:** The aim of this case is represented by the optimal abdominal wall reconstruction, based on international consensus, ensuring social reintegration and increasing the quality of life.

**Material and Method:** We treated a high-risk patient due to comorbidities with loss of domain hernia, admitted in SCMU Cluj-Napoca. Due to large defect and comorbidities, 6 weeks of abdominal wall preparedness where necessary with using of Dysport™ (500 U.I.) and progressive preoperative pneumoperitoneum (VT 1100 ml -10 days). Intraoperatively, the posterior separation of component (TAR) was used with the installation of 45x45cm mesh.

**Results:** Due to abdominal wall augmentation, intraoperative dissection was facile, with significant decrease of operating time and final intraabdominal pressure at a level of 13 mmHg. Postoperatively, a rapid recovery was observed with discharge on day 6. The functionality of abdominal wall increasing in month 1 postop based on abdominal wall strength at 5 from 2 points. Also, the quality of life increasing according EQ-5D.

**Conclusion:** Patients with large defect or loss of domain, adequate preoperative preparation with aid of wall augmentation and proper surgical technique is demanded. If preparedness is optimal, quick discharge with rapid recovery is achieved.

**Keywords:** loss of domain, reconstruction, pneumoperitoneum, Dysport™, TAR

## MULTIVISCERAL SURGERY FOR OVARIAN CANCER – CASE REPORT

Paula Bândea[1], Sabin-Christoph Mihai-Gref[1], Dan Mihai Căpîlna[1], Mihai Emil Căpîlna[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Epithelial ovarian cancer is one of the most common types of gynaecological cancer, affecting mostly middle-aged women. As a result of its silent symptoms, ovarian cancer is usually discovered in advanced stages (III and IV) and requires both surgical and oncological treatment.

**Objective:** The aim of this case report is to describe a successful multivisceral surgical treatment in a IIIC staged ovarian cancer.

**Material and methods:** We present a case of a 56-year-old female patient, suffering of abdominal distension for two months prior to the gynaecological appointment. An MRI investigation revealed peritoneal carcinomatosis without indicating the origin. CA125 maker is 7 times more elevated than the maximum normal value. Digestive tumor markers were in normal range. During the colonoscopy only 30 cm of the colon could be examined, due to the extrinsic compression. A gastroscopy did not reveal any abnormalities. Abdominal and transvaginal ultrasound have oriented the preoperative diagnosis. The following surgical management has been performed. Extraperitoneal Sugarbaker peritonectomy. Posterior pelvic exenteration (total hysterectomy, bilateral adnexectomy, rectal and sigmoidian resection) together with the resection of the peritoneum covering the bladder. Appendectomy. Omentectomy en bloc with splenectomy and resection of the left flexure of the colon. Left flank colostomy. Cholecystectomy and lymphadenectomy of the hepatic hilum. Resection of the small omentum. Omental pouch peritonectomy. Resection of the small intestine and mesenteric metastases. Six litters of ascites have been removed.

**Results:** Our patient had an uneventful postoperative period and she was discharged on the 7$^{th}$ postoperative day. The pathological examination revealed ovarian serous carcinoma Silverberg III.

**Conclusions:** Despite the advanced stage of ovarian cancer, the multivisceral surgery might be successful, enabling patients to start quickly the adjuvant chemotherapy.

**Keywords:** ovarian cancer, peritoneal carcinomatosis, posterior pelvic exenteration, multivisceral surgery

---

## THE IMPORTANCE OF MAINTAINING THE QUALITY OF LIFE IN FEMALES WITH GYNECOLOGICAL NEOPLASMS – USING THE 'V-Y FLAP' VULVAR RECONSTRUCTION TECHNIQUE SUCCEEDING HIGHLY INVASIVE SURGICAL PROCEDURES

Mara-Constantina Ilovan[1], Cristian-Ioan Cîmpian[1], Maria-Andreea Micu[1], Patrick Lazăr Dominik Chiciudean[1], Dan Căpîlna[1], Mihai-Emil Căpîlna[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** The surgical treatment of gynecologic malignancies is inclined to greatly affect the quality of life of female patients, as women experience negative consequences in regards to sexual activity, social integration, and psychological state. Vulvar cancer occurs relatively rarely, being typically treated with vulvectomy, involving consequent reconstruction. The 'V-Y advancement flap' is a technique that entails the harvest of the adjacent skin and underlying subcutaneous tissue to cover the primary defect.

**Objective:** The aim of this presentation is to stress the importance of electing the 'V-Y flap' reconstruction, due to its correlation with an increased rate of adequate surgical margins and reduced need for adjuvant radiotherapy, reduced rate of complications, therefore ensuing a better quality of life for oncological patients.

**Material and methods:** We report the case of a 48-year-old female patient, admitted to the Gynaecology Clinic due a perineal recurrence of a previously operated vulvar neoplasm. The patient formerly underwent a left hemivulvectomy with left inguinal lymphadenectomy, closely followed by radiation treatment. Subsequently, an iliac bone metastasis occurred, requiring a perineal plasty with gluteal skin graft, mobilized by using the sliding 'V-Y flap' technique. This technique was possible as donor site allowed appropriate mobilization, due to its laxity. The letter 'V' represents the shape of the incision that is initially made. The letter 'Y' constitutes the way the skin is thereafter closed.

**Results:** The postsurgical evolution of the patient has been highly favorable, as no severe complications have occurred.

**Conclusions:** Oncological patients require significant consideration of the possible treatment options, as the pros and cons must be weighted in order to ensure the patient's quality of life. A plethora of reconstructive techniques ought to be used to repair residual vulvectomy defects, yet in this case, the 'V-Y advancement flap' method ensued a reduced hospitalization time and overall patient satisfaction.

**Keywords:** V-Y flap technique, Vulvar neoplasm, Vulvar reconstruction

## MANAGEMENT OF GIANT AND SYMPTOMATIC LIVER CYST

Emilia-Paula Lucaci[1], Sandu Aprodu[2], Georgiana Mationi[2], Valentin Strugari[2], Cătălin Baltă[2], Daniel Gheorghe Popa[1,2]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures
2. 1st Clinical Department of Surgery - County Emergency Clinical Hospital Targu Mures

**Background:** Simple liver cyst (SLC) is the most common non-infectious hepatic cystic disease which can be detected at routine imagistic check-up or when it becomes bigger and symptomatic. The most common symptoms are severe abdominal pain, nausea, vomiting, early satiety. Oftentimes, a watchful wait and a periodic clinical and imagistic follow-up are enough, but some SLCs require medical, interventional or even surgical attention.

**Objective:** The aim of this case presentation is to show which is the adequate approach we opted for a gigantic SLC, in a female patient.

**Material and methods:** We present a case of a 74-year-old female patient who was admitted in our clinic, presenting uncontrollable right epigastric and hypochondrium pain, nausea for the last 3 months. An ultrasound and a CT scan were performed. A 10 cm diameter hepatic cyst, located in segment IV was discovered.

**Results:** After careful assessment of the case and with the patient consent, surgery was opted for: a laparoscopic exploration. For this fluid-filled lesion, evacuation by puncture, adhesiolysis and fenestration were performed, then hemostasis and drainage of the restant cavity. The patient had an uneventful postoperative evolution and was discharged on the 2nd postoperative day.

**Conclusion:** Some SLCs require conservative management with observation, whereas others call upon specific care. We ought to choose the right approach. In our case, surgery was the best option, based on mainly two things: the symptoms of the patient and the size of the cyst.

**Keywords:** simple liver cyst, abdominal pain, segment IV, evacuation

---

## LATERALLY EXTENDED PARAMETRECTOMY (LEP), THE LIFESAVER TECHNIQUE-CASE PRESENTATION

Cristian-Ioan Cîmpian[1], Mara-Constantina Ilovan[1], Patrick Lazăr Dominik Chiciudean[1], Maria-Andreea Micu[1], Dan Căpîlna[1], Mihai-Emil Căpîlna[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Introduction:** The laterally extended Parametrectomy (LEP) represents a radical surgical procedure. It is preceded by a radical hysterectomy and laborious lymphadenectomy. LEP entails the removal of the entire arterial and venous internal iliac system, including all the related pelvic branches. At the end of the procedure, the Levator Ani, and the internal Obturator Muscles, the Linea Arcuata, the Psoas and Piriformis Muscle and the sacral plexus can be seen clearly, with no connective tissue intervening.

**Objectives:** Our intention is to limelight the intricate technique of LEP and recommending it as a treatment choice in the case of tumors invading soft structures of the pelvic side wall.

**Material and methods:** We describe the case of a 54 years-old female patient, without comorbidities, with a histological diagnosis of endocervical grade II adenocarcinoma. A clinical examination and transrectal ultrasonography were performed, identifying an endocervical tumor of 39x35 mm with extension to the exocervix, peri-cervical fascia preserved, no parametrial invasion, staged 1b2. The CT scan outlined similar tumor characteristics, plus a lymph node of 15x12 mm at the left iliac bifurcation and several lymph nodes bellow 10 mm. The scheduled surgery was represented by type C2 Querleu-Morrow radical hysterectomy with pelvic lymphadenectomy and the extraction of an intraoperative frozen section from the suspicious lymph-node.

**Results:** As the frozen section of the left common iliac lymph node was positive, the surgery was successfully completed with left laterally extended parametrectomy, followed by paraaortic lymphadenectomy. The final pathology results emphasized 11/43 positive lymph nodes and microscopic metastases in both parametrial and LEP specimen-stage IIIc. The patient underwent adjuvant radiotherapy. At the moment, the patient is alive and free of disease.

**Conclusion:** The LEP is regarded as a laborious and difficult procedure, but with remarkable results.

**Keywords:** Laterally Extended Parametrectomy, LEP, lymph-node, Querleu-Morrow, lymphadenectomy

## MANAGEMENT OF BIOLOGIC THERAPY IN SEVERE ULCERATIVE COLITIS

Petrina-Florentina Dămean[1], Cosmin-Constantin Mutu[1], Olga Brusnic[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Ulcerative colitis is a chronic inflammatory bowel disease that usually affects the mucosa and submucosa of the colon and the rectum. This disease manifests with inflammation and ulcers and can lead to abdominal pain, diarrhoea and gastrointestinal bleeding. Most patients respond well to treatment involving 5-aminosalicylates, corticosteroids and immunosuppressors. Even so in some severe cases, biological treatment including TNF-α antagonists or anti-integrin agents is needed.

**Objective:** Our goal is to present the management of a patient with a severe form of ulcerative colitis that didn't respond to both classical therapy and biological therapy with adalimumab.

**Material and methods:** We present a case of a 59-year-old female known with a severe form of ulcerative pancolitis that presented with bloody diarrhea and pain localized in the coxofemural and lumbar region. The patient was first diagnosed in 2018 and was under treatment with Pentasa, Salofalk, Imuran, Normix and Zir-fos until May 2019 when corticosteroid treatment was initiated. In August 2019, because of the recurrence of symptoms, the patient was switched to biological treatment with adalimumabum 40 mg every two weeks. Unfortunately, this biological treatment didn't improve the patient's clinical condition because the patient developed antibodies against adalimumabum.

**Results:** We decided to switch the biological therapy from adalimumabum to vedolizumabum and the clinical state of the patient improved, with the remission of symptoms and decrease of calprotectin.

**Conclusions:** Vedolizumabum is a good alternative to older biological treatments in the context of non-responsive or refractory diseases.

**Keywords:** ulcerative colitis, biologic therapy, antibodies, adalimumabum, vedolizumabum

---

## TISSUE ENGINEERING AND EXACTLY HOW FAR ARE WE FROM SOLVING THE SHORTAGE OF TRANSPLANT ORGANS

Maria-Teodora Constantin[1], Maria-Larisa Cornea-Cosma[1], Bianca-Teofana Tutueanu[1], Nicolae-Alexandru Lazar[1], Eduard-Costin Argatu[2]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures
2. Vascular Surgery Clinical Department - County Emergency Clinical Hospital Targu Mures

**Background:** Since the first appearance of transplant, to this day, we use it as an end point option when trying to save a life. Despite its benefits, it also has some major downsides such as the rejection of it by the acceptor body and the lack of organs in comparison to the need. The concept of bioengineering comes with solutions to both these problems, so it represents a great research focus at the moment.

**Objective:** We aimed to find what progress has been made in this area and to summarize the latest improvements of the techniques. Another interest was to observe the obstacles that had risen along the way and how or if they were overcome, plus the modification in the estimation of the moment when everything will be ready to become a safe practice.

**Material and methods:** For our research we used 13 publications from which we have drawn strong valuable conclusions that we gathered in our study. Collectively, we debated the ups and downs present on the road of all those researches.

**Results:** Most of the trials that were linked to decellularized valves had fantastic outcomes, resulting in a in-situ and in-vivo recellularization, but some reported problems with calcification and endocarditis susceptibility. The trials involving liver, cornea and intervertebral discs were the closest ones to achieving the wished fixation and differentiation of stem cells. A possible direction for improvement might be the adjuvant administration of differentiation and growth factors alongside cell implantation.

**Conclusions:** With every research on this topic, we come closer to finding the best technique for repopulation of the scaffolds with viable and specifically functional cells, this being the last key thing needed to be figured out in order for this to become usual medical practice.

**Keywords:** transplants, bioengineering, stem-cells

## PANCREATICODUODENECTOMY WITH VASCULAR RECONSTRUCTION FOR ADENOCARCINOMA OF THE PANCREAS

Sandu Aprodu[1], Cătălin Baltă[1], Georgiana Petre-Mationi[1], Valentin Vasilică Strugari[1], Vitalie Popov[1], Daniel Gheorghe Popa[1,2]

1. 1st Clinical Department of Surgery - County Emergency Clinical Hospital Targu Mures
2. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Adenocarcinoma of the pancreas is a cancer with poor patient survival. Among different treatment options, surgical resection offers the best survival outcome for patients with carcinoma of the head of pancreas. Surgical resection provides the best chance of cure.

**Objectives:** We present a clinical case in which we prove the possibility of a pancreaticoduodenectomy with vascular reconstruction for adenocarcinoma of the head of pancreas.

**Material and Method:** We admitted a 47-year-old patient known with multiple cardiac pathologies, severe anemia, thrombocytopenia and malnutrition, who clinically presented with abdominal pain, nausea and weight loss - approximately 20 kg in 2 months. CT scan reveals a tumor mass at the level of the pancreatic head, without being able to specify implication of portal vascular system. The surgery is delayed in order to correct the anemia and the hydroelectrolytic dysfunction. Erythrocyte mass was administered along with analgesics and anti-inflammatory, antispastic, antibiotic and proton pump inhibitors medication.

**Results:** A bisubcostal laparotomy was performed followed by a Cattell-Braasch maneuver. Blunt dissection down along the portal vein is not possible, due to malignant invasion at. the junction between the PV and SMV. Thesegmental resection of the portal vein and splenomesaraic trunk is performed with the help of vascular surgeons. The vascular defect is closed with a synthetic graft (Goretex). After the removal of the tumoral specimen, digestive reconstruction was performed, involving pancreaticojejunal duct to mucosa anastomosis, hepatico-jejunal termino-lateral anastomosis, gastro-jejunal latero- lateral anastomosis and Braun enteroenterostomy.

The postoperative evolution was marked by the appearance of a previsceral hematoma which was drained with success and the patient was discharged 15 days postoperatively.

**Conclusions:** Pancreaticoduodenectomy with vascular reconstruction foradenocarcinoma of the pancreas is a method with postoperative bleedingrisks, but with a better life expectancy compared to standard procedures.

**Keywords:** Head of pancreas, portal vein resection, adenocarcinoma of the pancreas

---

## NEGATIVE PRESSURE WOUND THERAPY EFFICACY IN GANGRENOUS LESION MANAGEMENT

Gabriela Oancea[1], Iustina Diana Guraliuc[1], Iulia Maria Rus[1], Sorina Maria Mărginean[1], Cristian Trâmbițaș[1], Hussam Al Hussein[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Negative pressure wound therapy (NPWT) or vacuum-assisted closure (VAC) has revolutionized wound management in the past few years and compared to conventional wound therapy, it promotes better and faster healing, decreases the risk of infection and lowers hospital mortality, while requiring similar costs.

**Objective:** The aim of this report is to highlight the impressive clinical effects of the NPWT on treating severe gangrenous wounds.

**Material and methods:** We present the case of a 63 years-old female, smoker, with previously diagnosed diabetes mellitus type 2, ventricular dysfunction NYHA class II, hypercholesterolemia and cardiopathy secondary to essential arterial hypertension. Despite the adherence to antidiabetic treatment, the patient presented progressive pain in her left lower limb over the last two years, along with the onset of critical ischemia, followed by infected peripheral necrosis (Wagner grade 2) due to femoral artery occlusion. In order to reestablish vascularization of the lower limb, a femoropopliteal bypass was performed using a Dacron prosthesis. The gangrenous lesion, located in the lower half of the leg, presented an infection with Pseudomonas fluorescence and therefore, specific antibiotic therapy was initiated. In addition, negative pressure therapy with VivanoTec Pro® was performed, followed by applying Hydroclean® wet dressings and Resposorb® dry dressings.

**Results:** The therapy with Vivano Tec Pro® was applied for ten days, the device being set gradually from 80 to 125 mmHg in continuous mode. During the next six days, Hydroclean® wet dressings were used and Resposorb® absorbant dressings were applied in the following eight days. Considering the favorable evolution, the intervention for skin grafting was scheduled afterwards.

**Conclusions:** Vivano® therapy is an innovative technique that significantly promotes reduction in wound surface area, volume and depth, as well as granulation, angiogenesis and microbial clearance, thereby enabling a higher rate of limb salvage in case of ulcerous lesions.

**Keywords:** ulcer, Vivano®, NPWT, VAC

## APPROACHES IN CONGENITAL MULTIPLE-VALVE STENOSIS – CASE REPORT

Maria Teodora Cotruș[1], Diana Ramona Iurian[2], Liliana Gozar[2]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Tricuspid valve stenosis along with the pulmonary valve stenosis is a rarely encountered entity among congenital heart diseases. Valvuloplasty is the first option to be taken into consideration.

**Objective:** The aim is to present the approach in a 16-year-old patient with multiple-valvular stenosis.

**Material and methods:** We present the case of a 16-year-old male, diagnosed with severe pulmonary valve stenosis and severe tricuspid valve stenosis within the first year of life, who underwent pulmonary and tricuspid valvuloplasty a month after the diagnosis. After the intervention he was also diagnosed with Sinus Node Disfunction, for which a Pacemaker with atrial epicardial electrodes was inserted. During the postoperative evaluation, a severe residual pulmonary insufficiency with mild pulmonary stenosis and a severe residual tricuspid stenosis with mild tricuspid insufficiency progressively appeared. For both he underwent surgical biological valve replacement. During follow-ups, a mild stenosis of the biological prosthetic tricuspid valve was observed.

**Results:** Current clinical examinations revealed a slight limitation of physical activity, arrhythmic heart sounds, systemic murmur grade III/6 at the second left intercostal space and diastolic murmur grade II/4 at the left lower sternal border. The pacemaker follow-up detected atrial flutter episodes with 3:1 AV conduction in 40% of the times since the last surveillance. A transthoracic echocardiography and a transoesophageal echocardiography were performed, after which a therapeutic plan with electrical cardioversion was approached, following long-term anticoagulation therapy and antiarrhythmic therapy with Amiodarone. The next step which is taken into consideration is The Melody transcatheter tricuspid valve implantation therapy.

**Conclusion:** Congenital valvular stenosis is an important pathology, sometimes hard to manage. Valvuloplasty is usually just a temporary solution, and even the prosthetic implantation can sometimes fail. The valve-to-valve implantation can be taken into consideration as another resort in case of severe valvular insufficiency.

Key words: Congenital tricuspid valve stenosis

## THE DIFFICULTIES OF DIAGNOSING LUNG CARCINOMA BASED ON BRONCHOSCOPY FINDINGS

Dragos Octavian Tristu[1], Horatiu Sabau[1], Rares Georgescu[1], Adela Nechifor-Boila[1], Ovidiu Simion Cotoi[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Bronchoscopy is a widely utilized minimally invasive technique used to assess many lung pathologies. It is not as accurate when diagnosing peripheral tumors and prone to artefacts.

**Objective:** A 65-year-old patient presents itself at the hospital with sanguineous and mucopurulent sputum. Radiological and paraclinical investigations reveal a lobar pneumonia and a large tumor showing a macronodular aspect with a heterogenic partially aerated center.

**Material and methods:** A bronchoscopy was performed 3 months ago collecting a biopsy sample and bronchoalveolar lavage fluid. The biopsy showed groups of cells with large, irregular nuclei positive to CKAE1/3 and a high Ki67 level of 30-40%. The Bronchoalveolar lavage fluid was stained with HE and Pap revealing bronchial cylindric ciliate cells and a moderate salivary contamination. These are highly pleomorphic with large, uneven or hyperchromic nuclei and disproportional distribution of chromatin. The conflicting histopathological findings require a new biopsy to confirm the origin of the tumor and to establish a treatment course.

**Results:** Unfortunately, the patient came after a year complaining of a lumbar mass. The HE stain revealed muscular striate tissue and conjunctive fibrous tissue with a tumoral infiltrate. A desmoplastic stroma divides the tumoral proliferation which has an alternating appearance of glandular structure or diffuse disposition. The immunohistochemical analysis underlined that the tumoral cells are TTF1 and CTK7 positive and PSA, p40 negative. The TTF1 and CTK7 markers suggest an adenocarcinoma metastasis of the lung, especially in the absence of PSA.

**Conclusion:** Even though bronchoscopy is a very good tool to use for the screening of pulmonary cancer, the small biopsy size can sometimes not be conclusive enough to narrow down a diagnosis.

**Keywords:** adenocarcinoma, bronchoscopy

## WHEN TB IS NO LONGER MUNDANE-A CASE REPORT

Sergiu Crișan[1], Eugenia Corina Budin[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Endobronchial tuberculosis is a granulomatous infection of tracheobronchial tree caused by the Koch Bacillus. The encounter rate of endobronchial tuberculosis is about 2.2% for all patients with pulmonary tuberculosis and however, despite adequate therapy stenosis may develop.

**Objectives:** Our goal is to highlight the importance of bronchoscopy for diagnosis endobronchial tuberculosis.

**Material and methods:** We present the case of 75 y.o women who presented with a cough syndrome that started 2 years ago with white, mucous and foamy sputum. Due to resting and post-exertion dyspnea, the patient was investigated from a cardiological and gastroenterological point of view, but the symptoms remained. For this reason, she was admitted at the Pulmonology Clinic for specialized tests. The spirometry revealed an obstructive syndrome with moderate obstructive ventilatory dysfunction. Bronchoscopic examination revealed the discontinuity of the posterior wall of trachea in the distal third and right primitive bronchus, infiltration and extended necrosis and anthracosis: The suspicion of a mediastinal syndrome was raised and a computed tomography examination was required. CT scan observes trachea with irregular contour in the distal third and a small pulmonary condensation in the right middle lobe. Acid-Fast Bacillus test reveals more than 10 AFB/ oil immersion field (Grade 3+).

**Results:** 15 days after initiating antituberculosis chemotherapy, bronchoscopy was repeated, which reveals a significant decrease in tracheal lesion.

**Conclusion:** Because the positive rate of Acid-Fast Bacillus is low and the clinical findings are usually nondistinctive the diagnosis is often delayed. Biopsy of bronchial mucosa seems to be indicated, but bronchoscopy is the gold standard in diagnosis of this disease. The eradication of Mycobacterium tuberculosis and prevention of bronchial stenosis are the most important goals.

**Keywords:** bronchoscopy, Koch, sputum, stenosis, endobronchial

## CLINICAL AND IMAGISTIC CORRELATION IN ACUTE AORTIC DISSECTION-CASE REPORT

Iustina-Diana Guraliuc[1], Iulia-Maria Rus[1], Sorina Mărginean[1], Gabriela Oancea[1], Hussam Al Hussein[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Requiring fast assessment and optimal treatment, acute aortic dissection (ADD) is the result of a sudden tearing of the intimal aortic wall which leads to splitting the inner and the middle layers of the aorta by the blood rushing through and creating a double-barreled aorta. This life-threatening disease often manifests though sharp chest pain irradiating in the back being described as a ripping feeling.

**Objective:** The aim is to emphasize the importance of computed tomography angiography (CTA) in early identification of AAD and misdiagnosis prevention, by presenting the case of a heavy smoker patient with a history of untreated stage III arterial hypertension and class 2 obesity.

**Material and methods:** A 48-year-old man admitted to gastroenterology department, unresponsive to the classical treatment for severe abdominal pain, diarrhea and nausea, was diagnosed by abdominal CTA scan with descendent aortic dissection and superior mesenteric artery occlusion. The patient was hemodynamically stable, showing abnormal T inversion in DI, aVL, V4-V6 leads, indicating diffuse myocardial ischemia on the electrocardiogram examination. Another complete CTA was needed, revealing an aortic dissection extended from the aortic valve to the right common iliac artery (Stanford A type I DeBakey aortic dissection). Moreover, mild to severe aortic valve regurgitation was revealed by echocardiography examination. The patient has been transferred to the Emergency Institute for Cardiovascular Diseases and Transplantation of Târgu Mureș for surgical treatment.

**Results:** Aortic valvuloplasty and ascending aorta replacement with synthetic tubular graft were successfully performed, without intraoperative or postoperative complications.

**Conclusions:** This challenging disease may mimic diverse acute conditions, the presented case report highlighting the importance of appropriate imaging examination, careful history taking and correlation between clinical and imagistic data, being essential for lowering the risks of misdiagnosis.

**Keywords:** CT, ascendent aorta, graft, artery occlusion, hypertension

## THE QUALITY OF INFORMATION ABOUT STROKE – A CROSS-SECTIONAL STUDY OF WEBSITES IN ROMANIAN AND ENGLISH LANGUAGE

Mihaela Dobria[1], Dalma Kasza[1], Beata Katona[1], Valentin Nadasan[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Most patients seek health-related information online and their treatment choices may be influenced by the quality of resources they use.

**Objective:** To analyse the quality of English and Romanian online information about stroke.

**Material and methods:** The cross-sectional study included 25 Romanian and 25 English language websites intended for general population. Completeness and accuracy of information were evaluated by two independent assessors against a benchmark validated by three specialists. Compliance with credibility criteria and Brief DISCERN requirements were screened by one evaluator. DISCERN is a validated tool designed to help users judge the quality of information about treatment choices. Credibility, completeness and accuracy were measured on a ten-point scale while Brief DISCERN on a 30-point scale. Mean quality scores and standard deviations (SD) were calculated for each language sample. Mann-Whitney/unpaired t tests were applied to compare Romanian and English websites. In addition, Pearson/Spearman correlation tests were applied to check whether the credibility scores could predict completeness and accuracy of information. The cut-off for statistical significance was set at 0.05.

**Results:** The mean credibility scores for Romanian and English websites were 3.8 (SD 1.5) and 6.4 (SD 1.0) respectively. The mean completeness scores were 5.6 (SD 1.9) and 7.5 (SD 1.0) respectively. The mean accuracy scores were 6.2 (SD 1.0) and 7.5 (SD 0.9) respectively. The mean Brief DISCERN scores were 10.9 (SD 4,3) and 17.1 (SD 4.9) respectively. English language websites scored significantly better than those in Romanian language on all four quality measures. Credibility scores did not correlate with either completeness or accuracy scores of the Romanian and English language websites.

**Conclusion:** The quality of online stroke-related information varied from poor to good. English websites had significantly higher scores than the Romanian ones. Credibility did not predict the completeness and accuracy of information.

**Keywords:** stroke, consumer health informatics

## CYTOMEGALOVIRUS INFECTION LEADING TO PARAPARESIS: A CASE REPORT

Petrina-Florentina Dămean[1], Cosmin-Constantin Mutu[1], Cătălina Dubciuc[1], Liliana Bordeanu[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Cytomegalovirus (CMV) is a ubiquitous member of the Herpesvirus family. It can spread vertically, transplacentally from mother to child, and horizontally by body fluids. Cytomegalovirus infection usually has a mild course but, in some patients, especially immunodeficient ones, it can lead to severe symptoms including neurological manifestations.

**Objective:** We aim to present you the case of a patient with no prior medical history who developed paraparesis after cytomegalovirus infection.

**Materials and methods:** We present you a case of a 39-year-old male known by the rheumatology department since January 2021. The symptomatology was progressive and started in October 2020 after a cold with lower limb instability and motor deficit which prompted the patient to come to the emergency department of SCJU Târgu Mureș. A neurological exam revealed that a paraparesis was present but no neurological etiology was found. The patient was then sent to the rheumatology department where a full antibody panel was realized. All the antibodies were negative except for CMV which were 857 U/ml. The patient was treated with Prednison, Alfa D3, Aspacardin, Famotidine, Actovegin, Milgamma, Thiossen, Gabaran, Clexane, Perfalgan, Mabron associated with kinetotherapy.

**Results:** After treatment and kinetotherapy, the patient's motor function improved drastically being now almost completely healed.

**Conclusion:** Even in healthy individuals, viral infections can lead to an autoimmune response from the body that can affect the motor neurons leading to motor deficits. Thus, patients should be followed in the period after viral infections for neurological symptoms.

**Keywords:** Cytomegalovirus, paraparesis, motor deficit, autoimmune response

## A RARE LIFE-THREATENING COVID-19 COMPLICATION: SPONTANEOUS TENSION PNEUMOTHORAX

Matei Iurea[1], Emanuela Gabriela Hategan[1], Cristina Mării[1]

1. "Iuliu Haţieganu" University of Medicine and Pharmacy Cluj-Napoca

**Background:** The main COVID-19 complications, according to the World Health Organization, are acute respiratory failure, pneumonia and acute organ (especially heart, liver and kidneys) injury. However, despite not being among the most often met reported complications, patients can also develop spontaneous tension pneumothorax.

**Objective:** Our objective is to present the case of a 51-year-old male patient who developed a spontaneous tension pneumothorax shortly after being admitted for developing COVID-19.

**Material and methods:** This case report regards a male patient who was brought to the Emergency Department 3 days after developing pneumonia symptoms. Upon being admitted (with an Oxygen saturation of 83% without supplemental oxygen), the patient tested positive for the SARS-COV-2 and was sent to the Infectious Disease unit where he was placed on specific treatment and physiotherapy.

**Results:** After several days of treatment and some minor clinical improvements, the oxygen demands of the patient suddenly increased while the oxygen saturation levels dropped to 78% while receiving 16 liters of oxygen per minute through a Venturi mask. A chest x-ray was ordered and it revealed a significantly large pneumothorax of the right lung. Although a drain was inserted and the patient was sent to the intensive care unit, the right lung did not re-inflate despite the efforts of the doctors, thus leading to the decease of the patient 36 hours after being sent to the intensive care unit.

**Conclusions:** While spontaneous tension pneumothorax is rare in non-mechanically ventilated patients with COVID-19, this condition can still occur and can be life threatening. This is why in the event of a rapidly deteriorating Sars-Cov-2 infected patient, tension pneumothorax should be taken as well into consideration.

**Keywords:** Covid-19, spontaneous tension pneumothorax, pneumothorax

## DESMOID TUMOR OF THE ABDOMINAL WALL: A CASE REPORT

Maria-Andreea Micu[1], Patrick-Lazăr-Dominik Chiciudean[1], Mara-Constantina Ilovan[1], Cristian-Ioan Cîmpian[1], Tivadar Bara[1], Zsolt Zoltán Fülöp[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Desmoid tumors or aggressive fibromatosis are benign entities that develop from the connective tissue. Desmoid type fibromatosis may occur anywhere, but the most common site is the abdominal wall.

**Objective:** Our objective is to support the claim that there is indeed a correlation between the desmoid tumors and the familial adenomatous polyposis and to evidentiate the importance of the personal history in the orientation towards a correct diagnosis and an appropriate treatment.

**Material and methods:** We examined the case of a 24-year-old female patient who was admitted to the surgical ward presenting a tumoral formation in the left hypochondriac region and the left lumbar region that inflicted pain. The medical history included familial adenomatous polyposis that was treated in 2017 by total colectomy and a car accident that caused traumatic brain injury and resulted in left hemiparesis and spleen rupture. The CT scan revealed that there was a well limited structure with expansive characteristics localised at the left rectus abdominis muscle, that penetrates the omentum and the small intestine.

**Results:** After the CT-scan, exploratory laparotomy was compulsory, following left rectus abdominis muscle resection with the resection of the tumoral mass of 8/11/17 centimetres, intestinal suture, abdominoplasty with prolene mesh positioned retromuscular. The histopathological diagnosis was: desmoid tumor of the abdominal wall, which infiltrates the striated muscle and the underlying tissues, including the intestinal wall.

**Conclusions:** Desmoid tumors are aggressive tumors that have a high risk of local relapse; however, recurrence is less likely in abdominal wall tumors. The sole prognostic factor that influences disease-free survival is macroscopic margin involvement.

**Keywords:** desmoid tumor, abdominal wall, familial adenomatous polyposis

## SURGICAL MANAGEMENT OF GIANT SOLITARY FIBROUS BENIGN TUMORS (HEMANGIOPERICYTOMA)

Patrick-Lazăr-Dominik Chiciudean[1], Maria-Andreea Micu[1], Cristian-Ioan Cîmpian[1], Mara-Constantina Ilovan[1], Zsolt Zoltán Fülöp[1], Tivadar Bara[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Solitary fibrous tumors (SFTs) are rare primary tumors that can appear almost anywhere in the body. SFTs are usually benign, but they can be malignant in rare situations. These tumoral masses grow slowly and may not cause symptoms until they have grown to a large size.

**Objective:** The particularity of this case is not only the rare location, but also the size of the tumoral mass. The understanding of a proper surgical approach is of utmost necessity in order to fully remove the tumoral mass so that nerve compression syndrome is avoided.

**Material and Method:** We present the case of a 63-year-old woman who has been admitted to the surgical ward with a tumoral mass that has been developing for the last 30 years. The CT scan revealed that the mass measured 13,4/11,6 centimeters, and was limited by the suprafascial space of the paravertebral muscles. The central necrosis, present in the middle of the tumor, raised suspicion of sarcoma.

**Results:** The CT scan showed a tumoral mass with malignant characteristics of the soft tissues on the posterior median line. However, the histopathologic exam revealed that it is indeed a hyper vascularized benign tumor, with pT3 staging, having areas of vascularisation alternating with areas of hyalin degenerescece and ischemic necrosis, but the immunohistochemistry excluded the malignant character of the tumor. Prior to the anatomopathological examination, the tumor was surgically removed with proper hemostasis, and a Redon drainage tube was placed.

**Conclusion:** SFTs are uncommon, slow-growing mesenchymal tumors, and while surgical resection is the most common treatment option and delivers the best results for resectable tumors, radiation and chemotherapy may also play a role in the treatment plan.

**Keywords:** giant, solitary, fibrous benign tumor, hemangiopericytoma

## FUTURE TREATMENTS IN DIABETES - ARE STEM CELLS THE SOLUTION?

Maria-Larisa Cornea-Cosma[1], Maria Teodora Constantin[1], Bianca Teofana Tutueanu[1], Ana-Georgiana Cornea-Cosma[2]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures
2. Transylvania University of Brasov

**Background:** Diabetes has a global spread, being constantly growing. The disease is associated with a high degree of morbidity, this giving significant vasculopathies. It is involved in 80% of early deaths, along with cardiovascular, neoplastic and lung diseases. Estimates show the current existence of 425 million diabetics, joined by 352 million people whose glucose tolerance has decreased. prevalence has increased by 2.5 times from 2000 and statistics related to type 2 diabetes reveal the close link with the spread of obesity and the perpetuation of an inadequate lifestyle.

**Objectives:** The study aims to find alternatives to insulin treatment, while assessing possible therapies taking into account the efficiency, ethics, sustainability and the body's immune response. WHO's report says the population impact rate will increase by at least 45% by 2045, underlining the need to find an effective treatment scheme.

**Materials and methods:** We analyzed 15 international studies, mainly those that investigated the effects of experimental transplantation of multipotent and pluripotent cells in order to obtain pancreatic β-cells. We quantified and compared the information to preview the effectiveness of developing treatments.

**Results:** Following research, we found several sources of stem cells that could produce insulin. These include: human embryonic stem cells, induced pluripotent cells, human perinatal cells, bone marrow, endometrium, dental pulp or even adipose cells. Mesenchymal stem cells found in the placenta and amniotic fluid generate a low immune response and have a higher plasticity than adult ones.

**Conclusions:** The currently known replacement procedures for insulin treatment - pancreatic or β-island transplantation - require lifelong immunosuppression and lose, over time, the ability to hormone synthesis. Donors are insufficient, so procedures aren't widespread. Thus, β-cells derived from stem cells could meet the global need, but we must consider immunosuppressive treatment and the risk of teratoma.

**Keywords:** diabetes, stem cells, immunosuppressive treatment

## GIANT ECTOPIC PARATHYROID ADENOMA - CASE REPORT

Raluca Andreea Galdău[1], Daniela Sala[1], Ruxandra Darie[1]

1. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Ectopic parathyroid adenoma is a relatively rare condition in clinical practice, representing about 6-16% of primary hyperparathyroidism cases. It can pose several diagnostic and management challenges, with many of these patients needing "second look" surgery.

**Objective:** We aim to present a case of giant ectopic parathyroid tumor.

**Material and methods:** We present the case of a 66 year-old female, admitted to our unit with the following symptoms: osteoarticular pain, paresthesia, fatigue and depression. Laboratory investigations revealed increased PTH and calcium levels, with no renal function impairment. Thyroid gland ultrasound showed no visible abnormalities, therefore a parathyroid scintigraphy scan was performed and indicated a retrosternal hypercapting mass, starting from two centimetres inferior to the left thyroid lobe. Furthermore a neck and mediastinum computed tomography exam was performed, which confirmed the ectopic parathyroid adenoma suspicion. A left inferior parathyroidectomy was performed through cervical approach, sternotomy was not necessary.

**Results:** Postoperative evolution was favorable, the patient being discharged day three after surgery without any complications.

**Conclusions:** Any sings of hyperparathyroidism, without an evident parathyroid adenoma should alert phisicians to search for an ectopic parathyroid, using accurate preoperative imaging investigations. Doing so, parathyroidectomy surgery can have up to 95% succes rate, with the patient`s complete recovery.

**Keywords:** parathyroid adenoma, primary hyperparatiroidism

## A RARE ASSOCIATION BETWEEN APPENDICEAL MUCOCELE AND INTUSSUSCEPTION OF THE APPENDIX: CASE REPORT

Georgiana Petre-Mationi[1], Călin Dragoș Molnar[2], Sandu Aprodu[1], Cătălin Mircea Coșarcă[2], Alexandru Strat[2], Daniel Gheorghe Popa[2]

1. 1st Clinical Department of Surgery - County Emergency Clinical Hospital Targu Mures
2. George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures

**Background:** Appendiceal mucocele (AM) is an uncommon pathology, characterized by distention of the lumen due to accumulation of mucinous substance. Clinical presentation might be confusing and preoperative diagnosis is rare. Ultrasonography and mainly, computed tomography or resonance imaging are used for this purpose. There are four distinctive histological types of appendiceal mucocele: simple mucocele, focal or diffuse mucosal hyperplasia, mucinous cystadenoma and mucinous cystadenocarcinoma. Each type implies a different surgical treatment, which is the only curative approach.

**Objective:** The aim of this report is to highlight the right surgical attitude in a case of appendiceal mucocele associated with intussusception.

**Material and methods:** We present the case of a 34-year-old woman, admitted in the hospital with chronic pain in the right iliac fossa, aggravated by the recent installation of sub-occlusive episodes. Ultrasonography described a bilobate cystic lesion in the right iliac fossa, with dimensions of 60/30 millimeters, with a maximum thickening of the appendix wall of 4.5 millimeters. Magnetic resonance imaging was also performed and revealed a well-encapsulated sub-cecal cystic process. Considering the preoperative clinical and paraclinical evaluations, laparoscopy was performed and revealed the appendix with dimensions of 3/3/4 centimeters, a pseudotumoral aspect of the base and appendiceal intussusception. Additionally, conversion to classic surgery was decided, followed by appendectomy and partial resection of cecum.

**Results:** Histological examination showed inflammatory changes, with no signs of cellular atypia or epithelial hyperplasia and lead to the diagnosis of simple mucocele; patient was discharged on the 4th postoperative day.

**Conclusions:** Appendiceal mucocele is a rare disease with unspecific symptoms and surgical management depends on the pathological subgroup. Classic surgery is usually preferred, in order to avoid severe intra- and postoperative complications.

**Keywords:** appendiceal mucocele, intussusception, cystic tumor

# INDEX OF AUTHORS