

# CEURGEM Conference


Central European Gastroenterology Meeting

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## Sesja plakatowa

### Atypical case of recurrent abdominal pain — case report

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#### Atypical case of recurrent abdominal pain – case report

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#### Case report

- At the last consultation, routine investigations were performed and was diagnosed as having a urinary tract infection being discharged and receiving treatment. Repeated ultrasound (US) examination revealed only gallstones
- Last physical examination that led to this admission revealed sensibility in the left side of the abdomen and a palpable elastic formation in the right iliac fossa, formation that disappeared the next day after admission

#### Introduction

Though abdominal pain (AP) is a common complaint in emergency rooms (ER) or departments, it may lead to misdiagnosis<sup>1</sup>

#### Case report

- We present an unusual cause of intestinal obstruction in adults
- A 52-year-old patient was referred from the ER with multiple complaints, AP being the cardinal one. Abdominal pain was present over the past month, for which was repeatedly examined (at least twice) in the ER

#### Case report

- In the day of the previewed discharge, the AP reappeared as well as the palpable elastic formation, in the right side paraumbilical
- US examination raised the suspicion of ileocolic intussusception due to a polypoid tumour
- Contrast-enhanced computed tomography confirmed the findings and precised that the polypoid tumour is more likely a lipoma
- Surgery (right hemicolectomy) was performed and a fatty tumour (macroscopically) of the ileocecal valve was also found

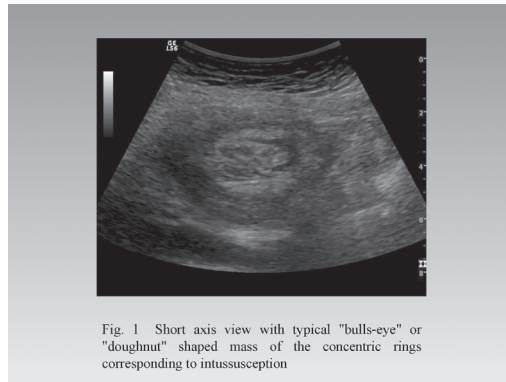


Fig. 1 Short axis view with typical "bull's-eye" or "doughnut" shaped mass of the concentric rings corresponding to intussusception



Fig. 4 Contrast-enhanced CT scan, sagittal section representing the intussusception tumour

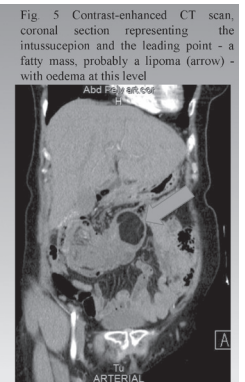


Fig. 5 Contrast-enhanced CT scan, coronal section representing the intussusception and the leading point - a fatty mass, probably a lipoma (arrow) - with oedema at this level

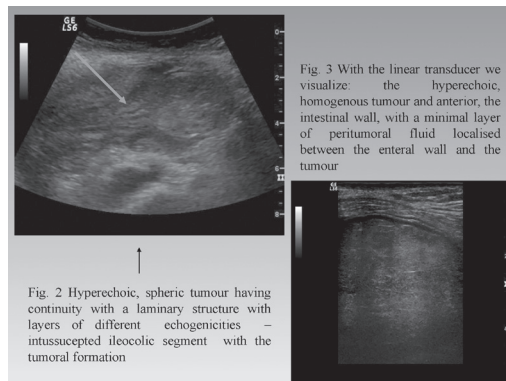


Fig. 2 Hyperechoic, spheric tumour having continuity with a laminary structure with layers of different echogenicities - intussuscepted ileocolic segment with the tumoral formation

Fig. 3 With the linear transducer we visualize: the hyperchoic, homogenous tumour and anterior, the intestinal wall, with a minimal layer of peritumoral fluid localised between the enteral wall and the tumour

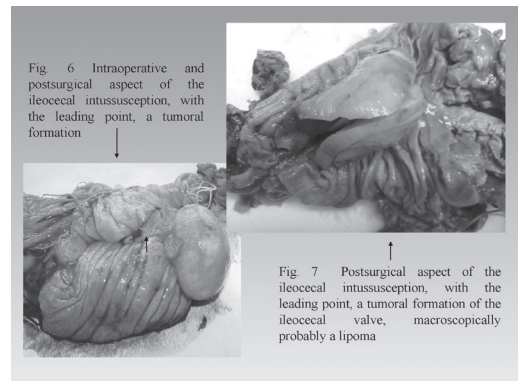


Fig. 6 Intraoperative and postsurgical aspect of the ileocecal intussusception, with the leading point, a tumoral formation

Fig. 7 Postsurgical aspect of the ileocecal intussusception, with the leading point, a tumoral formation of the ileocecal valve, macroscopically probably a lipoma

## Discussion

- If most of the intussusceptions are encountered in the pediatric population, adult intussusception is a rare condition<sup>2</sup> that accounts 5% of all cases of intussusceptions<sup>2-4</sup>
- An underlying cause is found in 70-90% of cases in adults<sup>3, 5, 6</sup>
- Pre-operative diagnosis remains difficult and in approximately 50% of the cases diagnosis is established intra-operatively<sup>7</sup>

## Conclusion

Intestinal intussusception in an adult caused by a benign tumour, typically asymptomatic if smaller than 2 centimeters, diagnosed first by US preoperatory renders peculiarity to our case

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# Is a complete remission of intestinal metaplasia a suitable endpoint in patients undergoing radiofrequency ablation (RFA)? Long-term results of rfa treatment in 67 consecutive patients

**IS A COMPLETE REMISSION OF INTESTINAL METAPLASIA A SUITABLE ENDPOINT IN PATIENTS UNDERGOING RADIOFREQUENCY ABLATION (RFA)? LONG-TERM RESULTS OF RFA TREATMENT IN 67 CONSECUTIVE PATIENTS**

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**BASELINE CHARACTERISTICS**

Total number of patients	67 (60M, 7F)
Age (range)	62 (20-86)
BORN:	65 patients:
• Early adenocarcinoma	25 patients (37.3%)
• High-grade intraepithelial neoplasia	22 patients (32.8%)
• Low-grade intraepithelial neoplasia	18 patients (26.9%)
ESC	2 patients (3%)

**TREATMENT MODALITIES**


RFA as a single treatment modality	20 patients (30%)
RFA combined with endoscopic resection or dissection of a visible lesion	47 patients (70%)

	HALO 360	HALO 90	HALO 60
RFA treatment sessions (n=125)	38	86	1



**INTRODUCTION**

- Radiofrequency ablation (RFA) in combination with endoscopic resection (ER) is a method of choice for treatment of early esophageal neoplasia
- Complete remission of intestinal metaplasia (CR-IM) and complete remission of dysplasia (CR-D) are commonly used as the endpoints of successful treatment
- The relevance of CR-IM (in patients with macroscopically normal neo-Z-line) has recently been challenged



**TREATMENT RESULTS I.**  
 (Analysis of 54 patients (82%) who have already finished the treatment)

CR-IM	65% (95% CI 63-70%)
CR-N	94% (95% CI 93-99%)
Recurrences of intestinal metaplasia	29%
Recurrences of neoplasia	3.7%
Detection of buried glands	0%

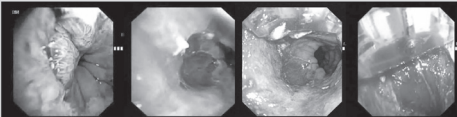


Figure 1. Endoscopic resection and RFA HALO 90 during a single session

**AIMS & METHODS**

- To assess the long-term efficacy of RFA
- A prospective, single center study (1/2009-4/2014)
- 67 patients were included (mean age 62)


**Indications for treatment:**

- Barrett's Oesophagus Related Neoplasia (BORN)
- Early squamous carcinoma (ESC)

**Treatment:**

- RFA with HALO system (HALO 360, HALO 90 and 60)
- ER – multiband ligation method

**Follow-up:** median 30 months (range 0.5-64)



**TREATMENT RESULTS II.**

Patients without CR-IM	35% (18 pts)
Macroscopically normal neo-Z-line	83% (15 pts)
Neo-Z-line with visible islands or tongues	17% (3 pts)
Recurrences of IM at the level of neo-Z-line	29% (10 pts)
Macroscopically normal neo-Z-line	90% (9 pts)
Neo-Z-line with visible islands or tongues	10% (1 pts)




Figure 2. Normal neo-Z-line after ER and RFA with persistent IM

Figure 3: Irregular neo-Z-line with recurrence of IM

## CONCLUSION

- RFA is effective and safe in treatment of early esophageal neoplasia
- A majority of patients without CR-IM or with a recurrence of IM have macroscopically normal neo-Z-line
- CR-IM and a recurrence of IM might not be clinically relevant endpoints in patients with macroscopically normal neo-Z-line after RFA

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# Cost-effectiveness of colonoscopy in the screening program (PCSP, Polish Colonoscopy Screening Platform); methodology deliberations

Cost-effectiveness of colonoscopy in the screening program (PCSP, Polish Colonoscopy Screening Platform); methodology deliberations.

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Michał F Kaminski,  
Milena Laskowska,  
Jarosław Regula.

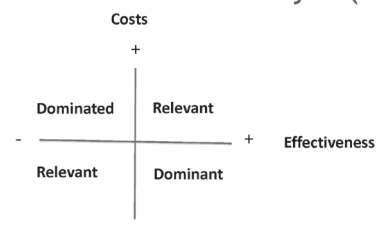
## Cost-effectiveness analysis (CEA)

- CEA has been applied for colorectal cancer already.
- Lack of such studies concerning situation in Poland.

## Cost-effectiveness analysis (CEA)

- CEA is a technique designed to measure costs and health benefits attributable to two or more medical interventions (or no intervention).
- Conducting cost-effectiveness analysis in medicine is becoming more and more important; however, methodology and access to reliable data for calculations is not readily available.

## Cost-effectiveness analysis (CEA)



## Cost-effectiveness analysis (CEA)

### Pros

- Synthetic tool.
- Helpful in decision-making process.
- Compares different medical interventions in complex system.

### Cons

- Availability and accuracy of data.
- Modeling vs. real world.
- Uncertainty due to unclear information.

## Methodology

- Comparing colonoscopy with no screening.
- Conducting sensitivity analysis.
  - Crucial variables: personnel costs, administrative costs and health benefits' data.
- Cost-effectiveness comparisons between different types of screening centres taking part in the program according to their founding.

## Aim of the study

- To use data from screening colonoscopy program within the TEAM project - "Experimental population based platform to evaluate and monitor the effectiveness of screening colonoscopy: a population based comparative effectiveness study. (PCSP, Polish Colonoscopy Screening Platform)".

## Expected results

- Data collected from approximately 80 screening centres will allow for reliable assessment and comparisons.
- It is expected that ICER calculated for the program will be lower than cost-effectiveness threshold in Poland.
- Significant differences in CEA between screening centres of different types are also expected.

## Methodology

- Analyzed period: 2012 – 2015.
- Data for the cost-effectiveness analysis obtained from Polish Ministry of Health and from the program databases.
- Calculating cost-effectiveness ratio (ICER).
  - **Costs:** personnel costs, administrative costs, histopathology costs, medical materials' costs, medical equipment costs, depreciation data, invitation to screening costs.
  - **Effects:** e.g. life-years gained.

### INCIDENTAL HEPATOCELLULAR CARCINOMA:

#### Risk factors and long-term outcome after liver transplantation

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**Conflict of interest:** The authors have declared that no competing interests exist.

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## INTRODUCTION

- Orthotopic liver transplantation (OLT) currently represents the treatment of choice in patients with early hepatocellular carcinoma (HCC)
- Despite the increasing quality of HCC screening methods in patients at risk, distinction of HCC from dysplastic nodules in cirrhotic liver before OLT remains challenging
- Therefore, hepatocellular carcinoma detected incidentally in the liver explant after OLT, denoted as incidental HCC (IHCC), is not infrequent
- However, the data describing the characteristics of IHCC patients and their clinical outcomes are limited

Abdominal ultrasound, CT scan and/or MRI



Histology

## RESULTS – ETIOLOGY & RISK FACTORS

Etiology of underlying disease	CI group N=606	IHCC N=33	P value
ALD	176 (29.1%)	17 (51.5%)*	
HCV	99 (16.3%)	11 (33.4%)*	
HBV	38 (6.3%)	3 (9.1%)	
Cholestatic	169 (27.9%)	0*	<.001
Metabolic	27 (4.5%)	1 (3.0%)	
ASH	34 (5.6%)	0	
Cryptogenic	45 (7.4%)	1 (3.0%)	
Other	18 (3.0%)	0	

Incidental HCC was predominantly found in patients transplanted for alcoholic liver cirrhosis (51.5%) and liver cirrhosis owing to hepatitis C (33.4%), whereas none of IHCC occurred in cholestatic liver cirrhosis

### Independent predictors of IHCC occurrence

Variables	OR	95% CI	P value
Age > 57 years	3.37	1.75 – 8.14	<.001
ALD or HCV	3.89	1.42 – 10.7	<.001
AFP > 6.4 µg/l	0.60	2.02 – 15.7	0.002

In the multivariate analysis we identified the age > 57 years, HCV or alcohol liver disease (ALD) and AFP level > 6.4 µg/l to be independent predictors for occurrence of IHCC

## AIMS & METHODS

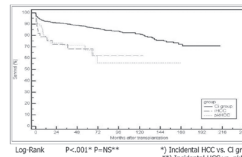
### Aims

- Comprehensive analysis of post-transplant survival of patients with incidental HCC in our center
- Comparison of their survival rate with patients with preoperatively known HCC (pkHCC)
- To identify risk factors of incidental HCC occurrence in cirrhotic liver

### Patients and methods

- We retrospectively reviewed 33 adult cirrhotic patients with incidentally found HCC (IHCC group) and compared them with 606 tumor-free cirrhotic patients (CI group)
- All patients underwent OLT in our center between 1/1995 and 8/2012
- Within the same period, a total of 84 patients were transplanted for pkHCC
- In the group of cirrhotic patients (CI + IHCC) we searched for risk factors of IHCC occurrence

## RESULTS – SURVIVAL



### Overall survival

1-, 3- and 5-year overall survival differed in IHCC patients compared with CI group (P<.001)

There was not a significant difference in overall survival between IHCC and pkHCC patients (P=NS)

Survival	1-year	3-year	5-year
CI group	93%	92%	87%
IHCC	79%	72%	68%
pkHCC	78%	71%	67%

### Recurrence of HCC

Tumor recurrence was detected in 3 patients (9.1%) with IHCC on average 30 months (19.5 – 66) after OLT

## RESULTS – PATIENT CHARACTERISTICS

Variables	CI group N=606	IHCC group N=33	P value
Men/Women	361/239 (59%/39%)	24/9 (73%/27%)	0.164
Mean age at OLT (years)	49 ± 11	57 ± 7	<.001
Median AFP (µg/l, range)	4 (0.5-474)	9.3 (1.8-293)	<.001
Mean Child-Pugh score at the time of enlisting on the WL (points)	9 ± 2	10 ± 2	0.012
Child-Pugh A	38 (6.3%)	0	
Child-Pugh B	291 (48.5%)	11 (34.4%)	0.077
Child-Pugh C	277 (45.7%)	21 (63.6%)	
Mean MELD score at the time of enlisting on the WL (points)	16 ± 5	16 ± 4	0.839
Median time on the WL (days, range)	84 (0-1331)	75 (5-413)	0.819

There was a significant difference in age, Child-Pugh score and alpha-fetoprotein level

## CONCLUSION

- We conclude that the survival of incidental HCC patients is worse than in tumor-free cirrhotic patients, but comparable with survival of preoperatively known HCC patients
- Independent risk factors for incidental HCC occurrence in cirrhotic liver are age, HCV or alcohol liver disease etiology of liver cirrhosis and AFP level

# Losing a pound and finding a penny

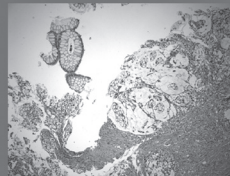
Title:

## Losing a pound and finding a penny

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University of Medicine and Pharmacy "Gr T Popa"  
Iasi, Romania

## Histology

- Rectal-sigmoid tumor - mucinous adenocarcinoma with *signet ring cells*

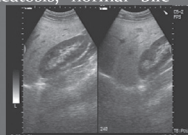


## GENERAL DATA

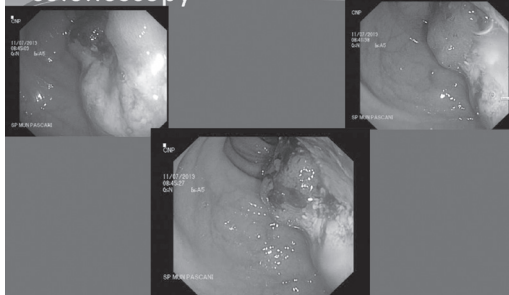
- B.C., male, 74 years old
- Past history - right renal cyst, prostate adenoma
- 07.2013 - admission - recent alteration of bowel transit (constipation alternating diarrhea), rectal tenesmus, flatulence, loss of appetite, rectal bleeding onset 3 months ago
- Rectal examination - tumor at 8 cm from the anal verge, on the right lateral wall of the rectum



- laboratory-
  - ESR - 58/90 mm/h/2h,
  - Haemoleucogram: normal;
  - plasma iron 44µg%,
  - CEA - normal
- Abdominal ultrasound - liver steatosis, normal bile ducts, portal vein and gallbladder no adenopathy
- Chest X- ray - normal



## colonoscopy



colonoscopy - at 8 cm from anal verge - stenotic large ulcerated tumor with spontaneous bleeding, which cannot be passed with the scope

## Losing a pound and finding a penny

- patient refused any treatment

AFTER 7 MONTHS

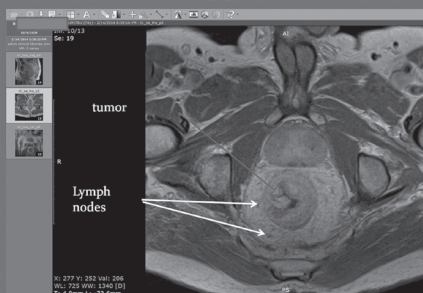
## Losing a pound and finding a penny

- 02. 2014 – weight loss, rectal bleeding, asthenia

## NEOADJUVANT CONCOMITANT CHEMORADIOTHERAPY TREATMENT

- RXT - 45Gy/25 fr/5 weeks on the rectum, mesorectum, internal iliac nodes, presacral nodes
  - a boost of 5.4 Gy on the rectum and mesorectum
- CHT - CAPECITABINA 875 mg/m<sup>2</sup>/day

## MRI cT3N2 CRM (-)



## JULY 2014 – after 8 weeks RCT

- Pain in epigastric region and in the right hypochondrium
- vomiting
- jaundice

## POSITIVE DIAGNOSIS

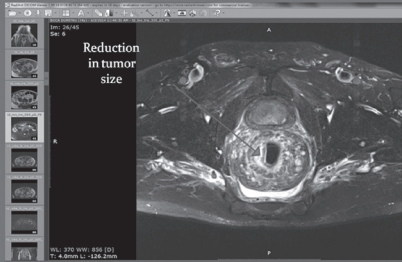
- MUCINOUS ADENOCARCINOMA WITH *SIGNET RING CELLS* OF THE MIDDLE RECTUM cT<sub>3</sub>N<sub>2</sub>M<sub>0</sub>

## MRI after RCT

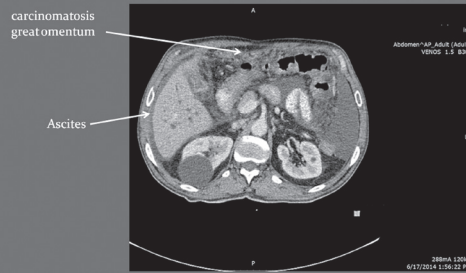
- Favorable evolution of the tumor after the RCT, the reduction in tumor size and decrease the number of nodes in the mesorectum



## Photo MRI after RCT



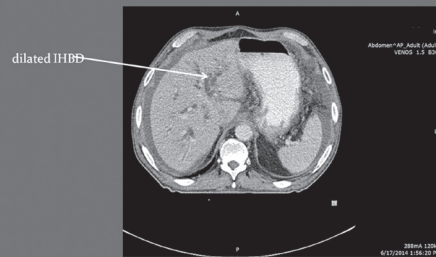
## Abdomen-pelvis CT exam



## lab

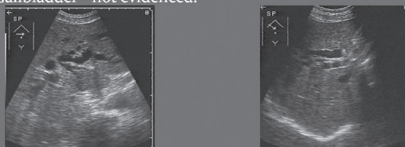
Service name	Value result	Normal value	Unit	Normal
ALP	708.71	40-119	U/L	No
ALT	81.27	< 50	U/L	No
AST	86.41	< 50	U/L	No
BIL_T	5.95	<= 1	mg/dL	No
BIL_D	5.37	<= 0.3	mg/dL	No
Bilirubin urine	6	negativ	mg/dL	No
CREA	0.35	< 1.2	mg/dL	Yes
GGT	477.59	< 60	U/L	No
aHCV (screening)	negativ	negativ		Yes
Ag HBs	negativ	negativ		Yes
PSA	2.34	< 4.0 anti <= 4 <= 50 anti <= 2.0 <= 60 anti <= 3 <= 70 anti <= 4.3 > 70 anti <= 4.4	ng/mL	yes

## Abdomen-pelvis CT exam

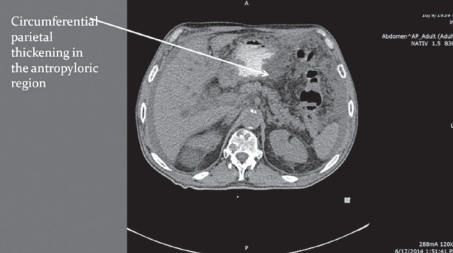


## Abdominal ultrasound

- Difficult examination –(ileus) minimal ascites
- Enlarged liver (AP diameter of LDH = 175 mm, the LSH = 94 mm)
- Bilateral IHBD dilated to 3,5 mm, hepatic duct dilated to 7 mm, the left up to 6 mm. Dilated CBD
- Not clear obstacle detected
- Gallbladder - not evidenced.



## Abdomen-pelvis CT exam



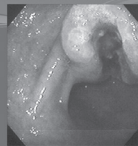
## Abdomen-pelvis CT exam

- Dilated intrahepatic bile ducts with amputation of the ducts near the common bile duct due to adenopathy
- Increased thickness of the gastric antrum
- Micronodular aspect of peritoneum suggesting carcinomatosis
- Aortic-cave, latero-aortic multiples adenopathies
- Medium size ascites
- Bone metastasis T9, T10, T12

## Abdominal surgery

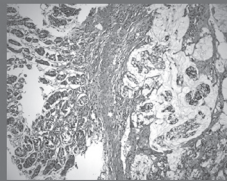
- laparotomy
- serohematic ascites
- tumor mass in the right upper quadrant, which involves the liver, gastric antrum, angle of the right colon, great omentum
- peritoneal carcinomatous
- multiple visceral and parietal carcinomatosis
- No signs of perforation or obstruction

## Upper gastrointestinal endoscopy- antral ulcerated tumor



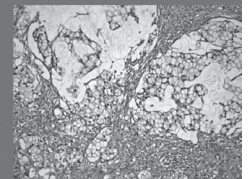
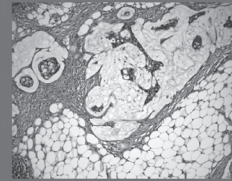
mucinous gastric  
adenocarcinoma

- Signet Ring cells



## HISTOPATHOLOGY of greater omentum

- Quasi-total infiltration of mucinous (colloid) adenocarcinoma



BUT.....

## Losing a pound and finding a penny

- Significant pain in upper abdomen, vomiting, clinical and radiological signs suggesting obstruction
- .....abdominal surgery in emergency....

## FINAL DIAGNOSTIC

- MUCINUS ADENOCARCINOMA OF THE MIDDLE RECTUM STAGE III
- MUCINUS ADENOCARCINOMA OF THE STOMACH STAGE IV

## LABORATORY – 3 DAYS AFTER SURGERY

Nome Serviciu	Valoare Rezultat	Valoare Normala	Unitate de Măsură	Normal
ALT	49.61	< 50	U/L	Da
AST	70.99	< 50	U/L	Nu
BIL-T	0.32	<= 1	mg/dL	Nu
BIL-D	0.29	<= 0.3	mg/dL	Nu
Cl	03.09	94-108	mmol/L	Nu
CREA	7.3	< 1.2	mg/dL	Nu
K	5.74	3.7-5.4	mmol/L	Nu
Na	133.88	132-145	mmol/L	Da
Urea	354.81	< 71	mg/dL	Nu
Hematocrit	35.7	37-51	%	Nu
Hemoglobin (Hb)	8.6	13.0-17.4	g/dL	Nu
Numar Leucocite	12.54	4-10	mil./µL	Nu
Numar trombocite	459	150-450	mil./µL	Da

## Gastric mucinous adenocarcinoma

- Gastric mucinous c.: more frequent antral, had deeper invasion, more frequent lymph node metastasis, more advanced pathologic stage, more frequent lymphatic invasion and lower disease-specific survival rates than patients who had NMGC
- However, a mucinous histology per se was not identified as an independent prognostic factor.

Cancer 2009;115:3581-90

No early mucinous adenocarcinoma

## DISCUSSION – mucinous adenocarcinoma-facts

- >60% for CRC and >50% for GC of tumor comprises a mucinous pattern upon histological examination
- Signet ring carcinoma: epithelial tumor >50% is made up isolated malignant cells containing intracytoplasmic mucin
- Mucinous adenocarcinoma of stomach 5% all gastric cancers
- Mucinous adenocarcinoma of rectum and colon: 10-20% all colorectal cancers
- American Joint Committee and College of American Pathologist consider not to be a prognostic factor when matched with similar stage and grade (2000)
- NCCN guideline do not describe it that MA histology should influence the therapeutic decision (2014)

## Gastric mucinous adenocarcinoma

- Negative mucin 1, cell surface associated (MUC1) status; positive mucin 2 (MUC2) status;
- Negative mucin 5AC, (MUC5AC) status and negative mucin 6, (MUC6) status (P < .001) were more frequent in MGCs.
- Lower incidence of HER-2 protein over expression, HER-2 gene amplification, and EGFR protein over expression than NMGCs;

Cancer 2009;115:3581-90

## DISCUSSION – mucinous adenocarcinoma-facts however

- Consorti (2000) survival better for non-mucinous tumor
- Higher metastasis rates
- Mucinous tumors (MT) seems to have different oncogenic and molecular pathways (Zhang H Int J Oncol 1999)
- MT have more K-ras, less p 53 mutation, less apoptotic activity
- Rectal mucinous:ADK poor response to neo-adjuvant chemoradiation (Simha V et al J Gastrointest Oncology 2014)
- Perez (2012) identify a category of poor responders- not advisable to wait 6 weeks for completion of NACRT to the time of surgery

## Gastric metastasis

- Gastric metastasis represents 1,2-1,8% of all gastric cancer (Zhou JJ, Miao XY WJG 2012)
- Majority of gastric metastasis were from breast cancer, melanoma, lung cancer
- Reported metastasis from ovarian carcinoma
- 21 mucin genes (designated MUC) have been identified in humans
- MUC1 - positive in 50% gastric mucinous ADK and 10% of colorectal mucinous C
- MUC6 - positive in 50-60% colorectal ADK and 10% gastric mucinous C
- <http://e-immunohistochemistry.info/web/>
- Field cancerization????