



Isfahan University of Medical Sciences  
Department of Gastroenterology



Iranian Association Of Gastroenterology And Hepatology  
Isfahan Branch

Feedback

# Advisory Commission and Grand Round

## January 01 2024



Digestive Health Center  
Azzahra Hospital, Isfahan

# A 32-year-old female

Patient has undergone a kidney transplant since 2 years ago, and since about 4 months after the transplant, an increase in liver enzymes has been observed, and no specific cause has been found during the investigations. No fatigue, no change of bowel movements, no nausea or vomiting and no abdominal pain.

# PMHx

The patient in 2016 at 16 weeks of pregnancy was admitted to the hospital due to high blood pressure, peripheral edema, proteinuria and increased creatinine, and underwent a kidney biopsy. The result of the biopsy was FSGS, and she was treated, and according to the doctors' opinion, a legal abortion was performed. He was treated for two years, and then dialysis started for the patient, and a kidney transplant was performed from June 2021.

She describes an increase in liver enzymes during dialysis (we have no evidence).

## **SHx**

He does not use cigarettes, alcohol or drugs

He exercises 40 minutes a day

## **DHx**

Cellcept 500 mg bid ×1

Prograf 1 mg bid ×1

Prednisolone 5 mg 1/2 qod

Levothyroxine /nephrivit/magnesium



- The patient intends to get pregnant, according to the course of liver enzymes and the result of liver biopsy, it should be examined in terms of the necessary recommendations and OK for pregnancy.

Lab date	Alt	Ast	Akp	Bili T	Bili D	GGT
00/07/18	58	25	221			
01/01/14	54	24	139			
01/02/10	40	24	153			
01/03/04	65	36	163			
01/05/04	110	34	381			
01/07/06	115	45	227	1.5	0.4	187
01/09/03	266	138	207			
01/12/10	50	31	178			
02/02/10	126	70	159			
02/04/19	65	37	160			
02/06/22	94	40	253			
02/09/01	44	35	169			

تاریخ پذیرش : 1400/07/18 07:52

## IMMUNOLOGY

	Unit	Reference Value
Immunoglobulin (IgG) .....	mg/dL	700-1400
Anti TTG(IgG) .....	AU/ml	Upto 20
Anti TTG(IgA) .....	AU/ml	upto 20
Hbs-Ag .....	Ratio	Negative(PHISHTAZ)

Method And Kit Name : Elisa phishtaz

HCV-Ab .....	Ratio	Nonreactive (PISHTAZ, Gen:3)
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Method And Kit Name : ELISA PISHTAZ

ANA (ELISA) .....	Index	Negative:<1 & Positive :>=1
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Smooth Muscle Antibody(IF) .....	Titer	UP to1/20
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Signature:

## BIOCHEMISTRY

Serum Iron .....	28
Iron Binding Capacity .....	318

## U. BIOCHEMISTRY

Urine Volume(24 h) .....	2100
Urine Copper 24 hrs .....	10
Urine Creatinine(24 h) .....	964

## HORMONE

Ferritin .....	290
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## IMMUNOLOGY

Anti LKM .....	Negative
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1401/08/11 18:18

Unit Reference Value

L micg/dL	37-145
micg/dL	228-428

Unit Reference Value

H ml/24 hr	1000-1500
micg/24H	10-70
mg/24 hr	600-1800

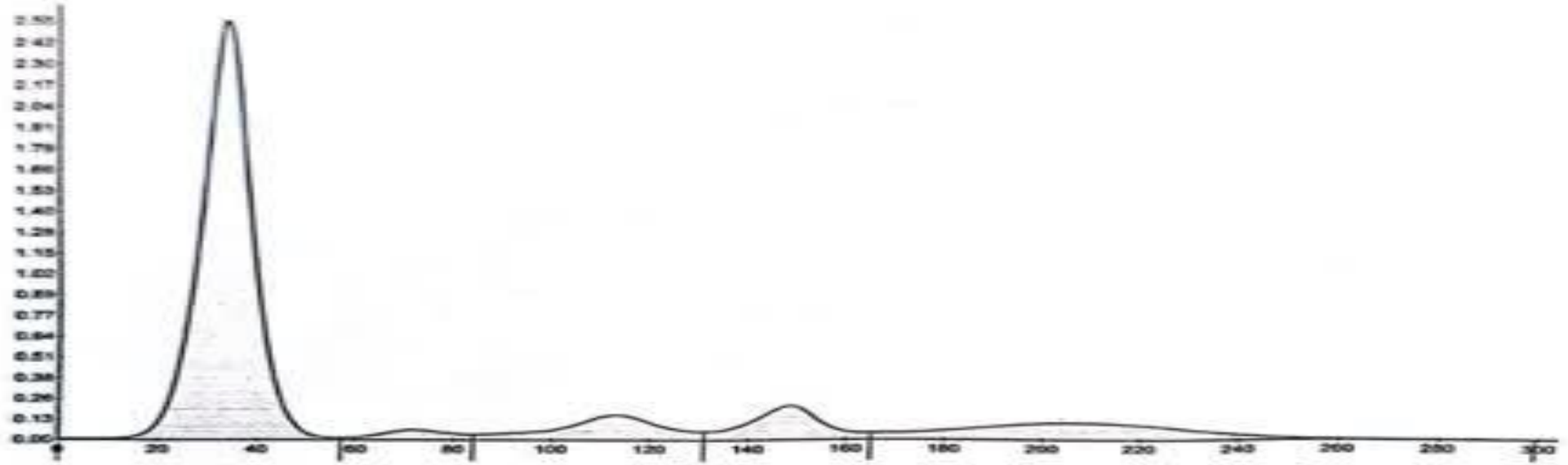
Unit Reference Value

ng/mL	10-291
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Unit Reference Value

Titer	up to 1/10
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### Serum Protein Hydragel Electrophoresis



Fractions	%	Ref. %	g/dl
Albumin	67.8	59.8 - 72.4	4.9
Alpha 1	2.4	1.0 - 3.2	0.2
Alpha 2	8.6	7.4 - 12.6	0.6
Beta	8.2	7.5 - 12.9	0.6
Gamma	13.0	8.0 - 15.8	0.9

A/G Ratio : 2.11

Total protein:

7.3 g/dl

Normal Range:6.6\_8.4 g/dl

**Comment:**

**Normal Pattern.**

24/01/01



**Molecular Diagnostic Division**

Test Name : Polyoma BK Virus (BK)

Specimen : Plasma

Method : Real Time - PCR

Result : **NEGATIVE**

Comment:

**Viral DNA was NOT detected in patient's sample.**

Test Procedure:

Patient sample is applied to DNA extraction followed by Real-Time PCR using specific primers.

Presence of BK specific amplicons is detected by specific probes.

Lab Director:

If you have more information please call us.

**PCR**

Unit Reference Value

**CMV PCR Quantitative**

Sample Type ..... Plasma

Method ..... DNA extracted by QIAamp DNA mini kit and QIAcube instrument. PCR was performed with Rotor-Gene Real-time PCR and CE & IVD approved detection kit.

Result ..... Cytomegalovirus DNA Undetectable.

**CMV PCR:  
Undetectable**

**Comment:** A result of "Undetectable" means the absence of CMV DNA or the CMV DNA concentration below the limit of the assay. CAUTIONS :The results should be interpreted in context of clinical finding, sampling, and laboratory data. If result obtained do not match other clinical and laboratory finding, please contact the laboratory for possible interpretation Misinterpretation of result may occur if the information provided is inaccurate or incomplete. Every molecular test has a 0.5-1% error rate This is due to rare molecular events and factors related to the preparation and analysis of sampling.

## MRCP

- Gall bladder is normal in size, shape and signal intensity.
- Intra and extra hepatic bile ducts show no dilatation.
- Pancreatic duct ectasia is not seen.
- Liver, pancreas and spleen appear normal.
- Kidneys are small and atrophic (CRF).
- Obvious CBD stone is not seen.

در بررسی gray scale :

کبد به طول ۱۱۴ میلیمتر اندازه ، شکل و اکوی پارانشیمال نرمال دارد . توده رویت نشد .  
مجاری صفراوی داخل کبدی نرمال است .

کیسه صفرا حجم و ضخامت جداری نرمال دارد . سنگ و اسلاژ رویت نشد .  
CBD قطر نرمال دارد.

قطر ورید پورت در ناحیه پورتا هپاتیس در حالت دم عادی ۶.۶ میلیمتر در حالت دم عمیق ۹.۶ میلیمتر  
میباشد. میزان تغییر قطر در سیکل تنفسی ۳۳ درصد می باشد که در محدوده نرمال است .

قطر ورید طحالی در حالت دم عادی ۴.۵ میلیمتر در حالت دم عمیق ۸.۲ میلیمتر میباشد. میزان تغییر  
قطر در سیکل تنفسی ۴۰ درصد می باشد که در محدوده نرمال است .

طحال به طول ۱۳۳ میلیمتر میباشد که اندازه حد فوقانی نرمال دارد. اکوی پارانشیمال نرمال میباشد .  
در بررسی کالر داپلر :

در ورید پورت فلوی هپاتو پتال نرمال مشاهده شد. سرعت متوسط ۱۱ سانتی متر بر ثانیه و سرعت حداکثر  
۱۷ سانتی متر بر ثانیه میباشد گرچه این سرعتها حد تحتانی نرمال است اما تغییرات تنفسی و اسپکتروم موج  
نرمال است.

شریان هپاتیک فلوی با مقاومت کم و RI برابر با ۰.۷۲ دارد.

قطر ورید کبدی میانی ۲ سانتی متر از IVC ۵.۳ میلیمتر است که در محدوده نرمال می باشد .  
در وریدهای کبدی فلوی آنته گرید با اسپکتروم نرمال به سمت قلب مشاهده میشود.  
وریدهای کولترال مشاهده نشد.

تفسیر : یافته های تصویر برداری به نفع هیپرتانسیون پورت رویت نگردید . ترومبوز در ورید پورت مشاهده  
نشد . علائم سندرم بودکیاری مشاهده نشد .

## History:

kidney transplant

## Macroscopic:

Received specimen in formalin labeled as liver consist several tubular soft tan pieces total length 2cm and 0.1cm in diameter.

## Microscopic:

Sections show liver tissue with normal cytoarchitecture contains 9 portal tracts. Portal tract was normal; rare lobular inflammation was identified parenchyma. On Masson trichrome staining fibrous expansion of portal tract with short septa was seen.

IHC staining n.1214 on block 8637 show:

-CMV: Negative

## Diagnosis:

Liver core needle biopsy;  
-Rare non specific lobular inflammation  
-Fibrosis stage :1/4

02/08/17  
Liver biopsy

# FEEDBACK

Dear Professor:

Thank you for introducing the patient. The patient was presented at the joint meeting of the commission and the grand round. The patient's documents were seen. After discussion and debates with our gastroenterologist colleagues and review of references and literatures, the following advisory decisions were made, which are announced to you for your information, help and, if you consider it appropriate, to apply:

An increase in patient's transaminases may be due to liver disease or medicines.

If the history and clinical course are match, HBV DNA check may help to detect its hidden types.

From the liver and GI point of view, the patient does not need further investigation and there is no contraindication to get pregnant, but she should be monitored during pregnancy and checked and evaluated at least once in every trimester.

Adjusting the dose of transplant drugs before pregnancy, especially Mycophenolate, may need to be followed up according to the nephrologist's opinion.



24/01/01

# A 34 years old female

**She was referred due to abdominal pain and diarrhea and multiple surgeries.**

**The patient describes the history of frequent and sometimes bloody diarrhea from childhood. She mentions the history of appendectomy at the age of 9, and 4 months after that, he developed a vaginal fistula (rectovaginal fistula?) and fecaloid secretions. It has been taken out to be examined by a colonoscopy, the origin of which is not specified. Then, due to abdominal pain and abdominal distension, he was hospitalized, a colostomy was inserted, and after that, the vaginal fistula secretions gradually decreased and then stopped one year after the colostomy. Colostomy was closed and then secretions from the vaginal fistula started again. Finally, with the acceptance of the surgery by the forensic doctor, at the age of 16, he underwent surgery for the vaginal fistula.**

Abdominal pains were transient after that and she was treated with neuromodulators under the supervision of a gastroenterologist. At the age of 17, following the death of her father, the abdominal pains worsened, and a colonoscopy was performed, and neuromodulators were continued.

The patient got married at the age of 17 and gave first delivery by caesarean section at the age of 19. She underwent surgery 40 days after delivery due to abdominal pain and obstruction. The adhesion band was diagnosed and enterolysis was performed, and part of the small intestine was removed.

- After the operation, while suffering from an infection and abscess at the surgical site and being treated with antibiotics, she was hospitalized again due to the exacerbation of abdominal pain and obstruction, and surgery was performed, and endolysis was performed.
- After the mentioned surgeries, the abdominal pain continued, and with the change of her gastroenterologist, she underwent another colonoscopy, and due to IBD, she was treated with Pentasa and Azram, for 3 years, and because Pentasa shortage, she stopped it arbitrarily.



At the age of 25, she got pregnant again, and the pregnancy was triplets, and in the 8th week of pregnancy, one gestational sac was aborted, and the other sac was empty of embryos and failed, and the other sac was preserved.

In the fifth month of the second pregnancy, due to intestinal obstruction, she was hospitalized again and underwent laparotomy, where enterolysis and ventral herniorrhaphy were performed. At 36 weeks, she underwent cesarean section and delivery.

She went to a surgeon last year due to abdominal pains, and during an ultrasound request due to numerous cysts in the left ovary, he underwent a left Oophorectomy. The patient herself mentioned that after the surgery, the abdominal pains improved for a short time.

- Abdominal pains have existed during the past years. She has been treated with mesalazine or Asacol enema by different doctors for IBD, despite endoscopy or pathology did not support IBD.
- After the recent surgery, the abdominal pain is mostly in the hypogastric region with the spread to the flanks on both sides, it is on and off, it has a pressing nature and is aggravated by consuming dairy products and legumes.
- Also, recently, along with the onset of abdominal pain, there has also been diarrhea with a frequent evacuation, which was accompanied by the discharge of pus and mucus.

- Currently, since about 2 months ago, she has been treated with budesonide by referring to a gastroenterologist with a possible diagnosis of Crohn's disease (she did not consent to a colonoscopy), after that, the number of pain attacks decreased and the intensity of abdominal pain was greater only when menstruation began.
- In the periods when there is no abdominal pain, the patient feels incomplete evacuation of feces and has 4-5 bowel movements during the day (tenesmus?), which has a loose consistency and does not contain pus or mucus.

# PMHx

- Recent hospitalization (one month ago) and another hospitalization 5 months ago due to abdominal pain with diagnosis of flare of IBD
- Diabetes since three years ago
- Total thyroidectomy last year due to malignant nodule ( papillary cell carcinoma)
- Fatty Liver
- Bipolar mood disorder

## **DHx:**

Oxycodone for abdominal pain, budesonide, Glutero 1000/5/12.5 /  
Diabezide, Levothyroxine, Asentra

Colonscopy up to terminal ileum  
 Indication: Evaluation for Crohn's Disease  
 Premedication: nil by mouth  
 Perianal region: Normal  
 Anus: Normal  
 Rectum: There were 4 small sessile polyps which were removed by biopsy forceps. The mucosa of rectum appeared normal. No evidence of fistula or inflammation.  
 Sigmoid: Normal  
 Descending Colon: Normal  
 Transverse Colon: Normal  
 Ascending Colon: Normal  
 Cecum: Normal  
 Terminal ileum was intubated & the scope passed up to the ileum. The mucosa appeared to be normal. Multiple biopsies were taken.  
 Impression: Multiple diminutive rectal polyps  
 No evidence of IBD

86/02/07

Multiple diminutive rectal polyps (removed by forceps)

Rectal mucosa was normal

Terminal ileum was normal

No evidence of IBD

Endoscopy No: شماره اندوسکوپی: Date of Report: تاریخ تنظیم گزارش: تعرفه درمانی: 990  
91.11.19

Atropine mg IV ;  Diazepam mg IV ; Xylocain  Suspensio  Sparys

Type Of Endoscopy: نوع اندوسکوپی: Total colonoscopy + ileoscopy  
Discription: شرح: Sordicativ: abetal puris  
preparatin: poor  
premedicati: 2.5mg midazolam

Ans. skin tag  
mucosal tags, probable fissur:

Rect. Sigmoid. Descend. je. Transvers & Ascend. je.  
cals evaluated but due to poor preparation  
some abnormality might be missed

Terminal ileum appeared well



Anus: skin tag mucosal tag probable fissure  
Due to bad preparation some abnormality might be missed



Rectosigmoid



Descending Colon



Rectosigmoid



Rectosigmoid

۹۲/۰۴/۳۰

**Sedation:**

Anus: Normal (Colon was very bad prep)

Rectosigmoid: Rectosigmoid mucosa was hyperemic & edematous. Vascular pattern of the mucosa was abnormal so that, biopsy was done.

Descending Colon: Focal erythema was seen

Transverse Colon: Scopy of transverse colon was impossible due to colon was very bad prep

Ascending Colon:

Caecum:

Final Diagnosis: Comment : See pathology report & follow Up

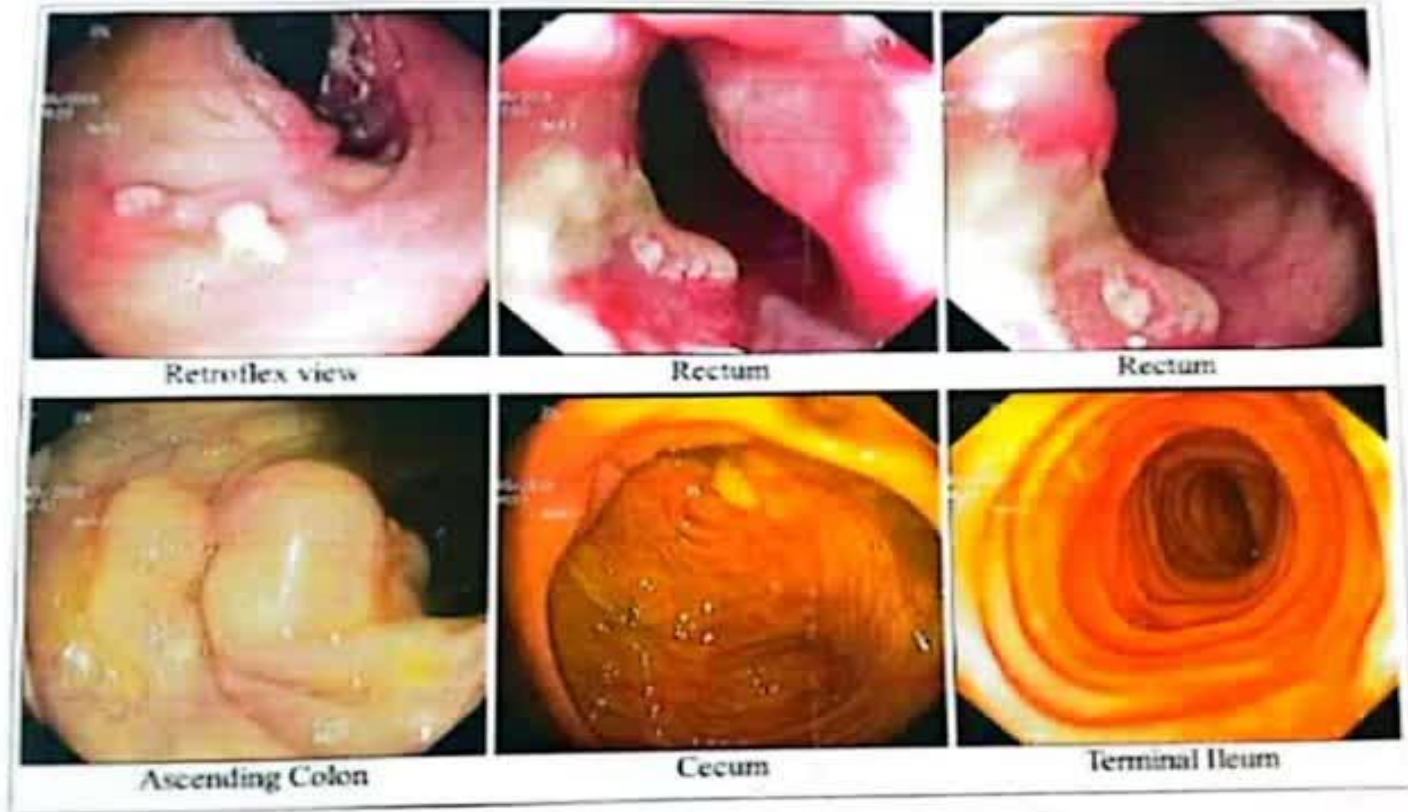
92/04/30

Rectosigmoid mucosa was hyperemic and edematous

Vascular pattern was abnormal

Focal erythema was seen in descending colon

Scope was not passed from transverse colon due to bad preparation



98/02/11  
 Solitary rectal ulcer  
 Pneumatosis coli in ascending colon  
 Ileum: normal

**Anus** : Normal

**Rectum** : Solitary rectal ulcer .

**Sigmoid colon** : Normal

**Descending colon** : Normal

**Transverse colon** : Normal

**Ascending colon** : Pneumatosis Coli Biopsy was taken sent to pathology.

**Cecum** : Normal

**Ileum** : Normal

**Diagnosis** : Pneumatosis Coli.....Solitary ulcer

24/01/01



00/04/28

Small SHH

**Procedure: Upper GI endoscopy**

**Indication: Melena??**

**Premedication: Spray Iidocaine .**

**Esophagus: Normal. I**

**No esophageal varices.**

**Stomach: Small sliding hiatal hernia. Cardia, Fundus, Body and Antrum were normal.**

**Duodenum: D1 D2 were normal.**

**Imp: Small sliding hiatal hernia**

میکروسکوپی :

نمونه ارسالی با برجستگی بیوپسی کولون (با شماره لام ۱۸۲) شامل چندین قطعه بافت گرم خاکستری جمعا با ابعاد ۱/۸۰/۱۰ سانتیمتر دارای فولام نسبتا نرم میباشد.

میکروسکوپی :

در بررسی میکروسکوپی بیوپسی ارسالی از کولون :

مقاطع از اپی تلیوم غندی روده بزرگ مشهود است. عدد توپولاز و دارای ساختار منظم میباشد. اتروفی و اینرمالیته در ساختار دیده نمیشود. فیشر اسون متوسط طولهای انتهایی لنفوپلاسماسل و تعداد اندک نوزینوفیل در لامینا پروپریا دیده میشود.

نفوذ لنفوسیتها به اپی تلیوم سطحی در محدوده طبیعی است و ضخامت کلاتژن ساب اپی تلیال در رنگ آمیزی ماسون تریپکروم کمتر از ۱۰ میکرومتر میباشد. Cryptitis، آبسه کریپتی، گرانولوم و فیشر دیده نشد.

اگر تشخیصی دیده نشد.

**DX: Colon Biopsy:  
Near Normal Histology.**

94/05/09  
BX of colon mucosa  
Near normal histology

### **Macroscopy ( N #99-391 ):**

Received specimen in formalin consist of 4 irregular creamy soft tissue fragments totally measures 0.5x0.4x0.3 cm.Labeled as" Colon "mucosa biopsy.

SOS:4/1 Embedding = Total.

### **DX:Colon, mucosa , biopsy:**

- 
- Colon type mucosa with Non specific pathologic changes.
  - No evidence of active colitis or granuloma.
  - No evidence of dysplasia or malignancy.

Pathology report(BX of colon mucosa)

# Pathology report(BX of rectal polyp)

تاریخ گزارش: ۱۳۹۹/۰۵/۲۸

تاریخ پذیرش: ۱۳۹۹/۰۵/۱۵

شماره پذیرش: P99-104



## Surgical Pathology Report

**Site of specimen: Rectal biopsy**

**Macroscopic:**

*Received specimen consist of 4 pieces totally 0.3cm in diameter*

**Microscopic:**

*Sections show fragments of polypoid architecture , in surface there are finger like progection and tubular glands in stroma with hyperchromatic nuclei .*

**Rectal biopsy :**

**DIG: Tubulo villous adenoma with low grade dysplasia**

## **MR Enterography:**

*Field strength: [ 1.5] T*

*IV contrast material (agent and volume): [Omniscan 15 ml]*

***Poor technic MR entrography due to patient incooperation as far as detected***

*Findings : Image quality: [Satisfactory]*

*Small bowel distension: [Satisfactory]*

*Peristalsis: [Normal]*

*Skip lesions: [None]*

*Appearance [Homogeneous ]*

*Stomach: [Normal]*

*Colon: [Normal]*

*Gallbladder: [Normal]*

*Spleen: [Normal]*

*Kidneys: [Normal]*

*Bones: [Normal]*

*Bowel wall thickening: [None]*

*Enhancement: [Normal]*

*Adenopathy: [None]*

*Duodenum: [Normal]*

*Liver: [Normal]*

*Pancreas: [Normal]*

*Adrenals glands: [Normal]*

*Lung bases: [Normal]*

***Impression : Suboptimal MRI study as far as detected normal***

98/12/11

MRE:

NORMAL

**Dear Dr.: Thank you for referring your patient to this department.**

**..... Abdominopelvic M.D.CT Scan .....-**

The liver size and its parenchyma seem normal.

Cystic or solid liver lesion is not present.

Intra and extra hepatic biliary ducts are normal.

Gall bladder has smooth walls without calcified biliary stone.

No pancreatic mass lesion is present.

Spleen has normal size and contour.

Abdominal aorta and its main branches have normal diameter without significant stenosis.

No Para-aortic lymphadenopathy is seen.

Both adrenal glands have normal configuration.

Kidneys have normal shape and enhancement without renal mass.

There is no evidence of hydronephrosis.

Bladder wall thickness is normal without intravesical mass or stone.

Bowel loops have normal caliber.

**Both adnexal fluid attenuating lesions are visible.(R/O ovarian cyst with US)**

**Evidence of previous abdominal wall incision is seen without dehiscence at present.**

Spinal vertebrae and bony pelvis are normal without lytic/blastic lesion.

Intraperitoneal fluid was not seen.

**IMP:**

**Post-surgical changes as described**

## در سونوگرافی به عمل آمده از شکم ولگن :

- شکل و ابعاد و اکوی پارانشیمال کبد و طحال نرمال است. (spleen span=100 mm)
- اکتازی مجاری صفراوی داخل و خارج کبدی رویت نشد. قطر ورید پورت و قطر CBD نرمال است.
- کیسه صفرا دارای حجم و ضخامت جداری طبیعی است. سنگ و اسلژ در کیسه صفرا مشاهده نشد.
- پانکراس و آنورت در حد قابل بررسی نرمال هستند
- هر دو کلیه دارای شکل و ضخامت و اکوی پارانشیمال طبیعی هستند.
- سنگ و هیدرونفروز در کلیه ها رویت نشد.
- مثانه دارای حجم و ضخامت جداری نرمال است. توده فضا گیر و سنگ در آن مشهود نیست.
- رحم دارای سایز و شکل نرمال است.
- تخمدان راست دارای ابعاد و اکوی نرمال است
- ضایعه سالیده و سیستیک در آدنکس راست رویت نشد.
- تخمدان چپ در محل آناتومیک خود رویت نشد. (اوفورکتومی چپ؟)
- در شکم ولگن مایع آزاد رویت نشد.

# Calprotectin levels

Data	Calprotectin
93/05/12	43
94/07/27	>1000
96/09/11	>600
02/08/15	10.5



Lab date	WBC	HGB	MCV	PLT
94/07/30	6500	13.3	93	216000
96/09/11	7080	13	82	258000
98/01/24	8400	13.6	83	245000
02/08/30	10900	12.2	84	277000

Test Name	Result	Units	WBC Differential (%)	
WBC	7.08	10 <sup>3</sup> /uL	Neutrophil	58.3%
RBC	4.95	10 <sup>6</sup> /uL	Lymphocyte	28.1%
HGB	13.0	g/dL	Monocyte	11.0%
HCT	40.8	%	Eosinophil	2.3%
MCV	82.4	fL	Basophil	0.3%
MCH	26.3	pg		
MCHC	31.9	g/dL		
PLT	258	10 <sup>3</sup> /uL		
RDW-SD	40.1	fL		
RDW-CV	13.7	%		
PDW	13.5	fL		
MPV	10.9	fL		
P- LCR	32.4	%		
PCT	0.28	%		
Neutrophil	4.13	10 <sup>3</sup> /uL		
Lymphocyte	1.99	10 <sup>3</sup> /uL		
Monocyte	0.78	10 <sup>3</sup> /uL		
Eosinophil	0.16	10 <sup>3</sup> /uL		
Basophil	0.02	10 <sup>3</sup> /uL		

**Notes:** -Simense Advia 2120 Hematology analyzer  
-Sysmex XT 1800i Hematology analyzer

**Hematology**

Test	Fla	Result	Unit	Method	Reference Range
(Sed.rate)1.ST.HR		14	mm/h		Male : 0-20 Female : 0-25 child : 0-10
(Sed.rate)2.ST.HR		39			

**Notes:** -Auto ESR Analyzer ELeclab  
-Coagulometer Stago  
-Electrophoresis by Capillary 2 Flex

**Serology**

Test	Fla	Result	Unit	Method	Reference Range
C.R.P		11.8	mg/L	Immunoturbidimetri	Up to 6

24/01/01

# Hormon

Test	Fla	Result	Unit	Method	Reference Range
ASCA-IgG		<b>1.5</b>	Au/ml	Chorus	Negative <12 Positive >18 Equivocal 12 - 18
P ANCA		<b>0.3</b>	U/ml	EIA(orgentec)	Normal < 5 Elevated > 5
Calprotectin in stool		<b>&gt;600</b>	ug/g	Buhlman(EIA)	Negative < 50 Low inflammatory response 50 - 200

# Question?

- Do you agree with the diagnosis of Crohn's?
- Should anti-TNF treatment be started?



# FEEDBACK

Dear Professor:

Thank you for introducing the patient. The patient was presented at the joint meeting of the commission and the grand round. The patient's documents were seen. After discussion and debates with our gastroenterologist colleagues and review of references and literatures, the following advisory decisions were made, which are announced to you for your information, help and, if you consider it appropriate, to apply:

In multiple and consecutive EVALUATIONS, there is no endoscopic, histological and imaging evidence in favor of IBD, and the clinical course is not consistent with Crohn's. Intermittent increase of calprotectin can be caused by SRU, other inflammations and infections, but celiac serology is better to check.

Rheumatology and psychiatry consultation to investigate and stop oxycodone and treat chronic anxiety disorders.

A colchicine trial OR by empiric treatment of SIBO may aid in diagnosis and treatment.

However, to completely R/O Crohn's disease, double coronal balloon enteroscopy is choice, which, of course, is difficult and expensive, but if it is not possible, to repeat MRE with good quality may helpful.

A pelvic MRI may also help.



# A 29-year-old female

- Patient with a history of hepatitis B for about 2.5 years, who has been under medical treatment, is currently 6 months pregnant, and has been referred to decide to continuing or terminating the pregnancy.
- Her husband also has hepatitis B.

DHx:

1 spoon of MOM syrup every 8 hours

Replicut (Tenofovir disoproxil fumarate) 300mg daily

# Lab Data

1399.05.01

WBC 5.1	AST 56	FBS 91
NEU:40% LYM:49%	ALT 76	BUN 13
RBC 5.2	ALK 301	CR 1
HB 13.8	TG 126	CRP NEG
MCV 76	CHOL 139	
PLT 193	HDL 29	
	LDL 85	



# Lab Data

1400.08.30

WBC 9	PT 12.5
NEU:69% LYM:25%	PTT 30
RBC 4.4	INR 1.1
HB 12.7	Billi.T 1.3
MCV 79	Billi.D 0.5
PLT 172	AST 29
	ALT 22
	ALK 235

## Molecular Diagnostic Division

Test Name: Hepatitis B Virus (HBV)

Specimen : Plasma

Method : Quantitative PCR

Result : 280 (IU/ml)

← 1 x 10<sup>8</sup>

### Test Procedure:

Total DNA was extracted from patient's plasma and followed by Real-Time PCR using specific primers and probe. Presence of HBV specific amplicons was detected by specific fluorogenic probes.

HBV DNA viral load was 280 (IU/ml).

# Sonography

1400.09.02

The size of the liver is 125 mm normal, but its echogenicity is slightly increased and coarse. (Fatty liver grade 0-I)

The image of a hemangioma with a diameter of 6 mm is seen in the right lobe of the liver.

Dilation was not seen in the intrahepatic and extrahepatic bile ducts. The diameter of the proximal CBD is 2 mm and normal.

The portal vein (9) mm and hepatic veins have normal diameter and flow.

There were no signs of stones, sludge, or thickness of the wall in the gallbladder.

The volume and wall of the gallbladder is normal.

There is no evidence in favor of ascites fluid in the abdomen, and the patient is pregnant.



# Lab Data

1401.05.06

WBC 6.2	TG 50	HBS Ag POSITIVE
NEU:50% LYM:44%	CHOL 134	
RBC 4.9	HDL 42	
HB 12.8	LDL 82	
MCV 77		
PLT 192		

# Lab Data

1401.10.29

WBC 5.8	AST 45
NEU:45% LYM:38%	ALT 53
RBC 5.4	HBS Ag 15
HB 13.8	
MCV 77	
PLT 181	

# Pregnancy sonography

1402.06.28

Fetal Heart Rate : Normal( 158 bpm)

Fetal Presentation: Breech

Position Of Placenta: Anterior - low lying

Amniotic Fluid index: normal

Mean Ga= 14 w 0 d

B.P.D = 25 mm: 14 w 2d

He =94 mm: 14 w 1d

Ac = 80 mm: 14w 2d FI = 12.3 mm: 13 w 4d

Fw= 88 gr

درمانگاه نورالهدی  
برگه گزارش سونوگرافی

تاریخ پذیرش: 1402/06/28 نوع سونوگرافی: حاملگی

**Number Of Fetus: Single**

**Fetal Heart Rate : Normal( 158 bpm)**

**Fetal Presentation: Breech**

**Position Of Placenta: Anterior – low lying**

**Amniotic Fluid index: normal**

**Mean Ga= 14 w 0 d**

**B.P.D = 25 mm: 14 w 2d**

**He = 94 mm: 14 w 1d**

**Ac = 80 mm: 14w 2d**

**FI = 12.3 mm : 13 w 4d**

**Fw= 88 gr**

**EDD:2024.3.19**

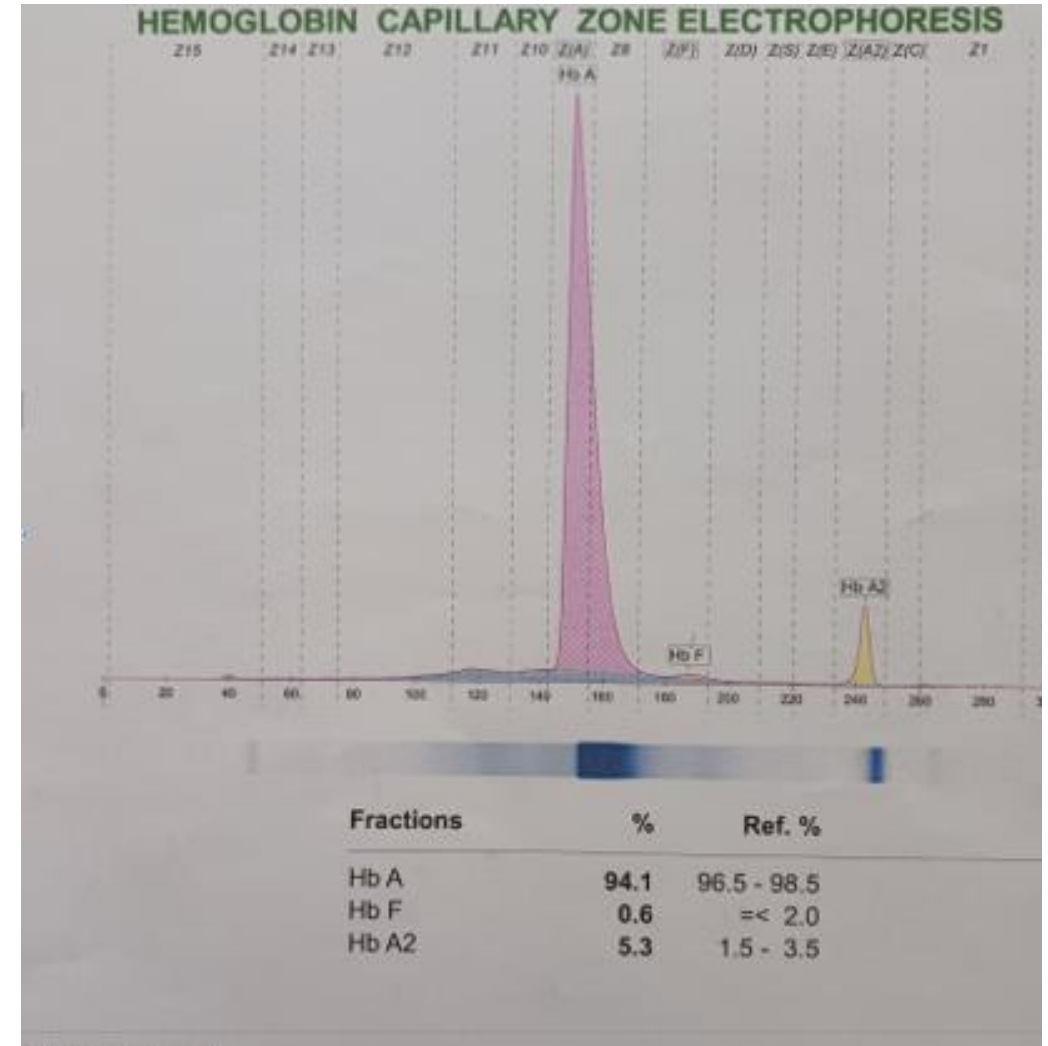
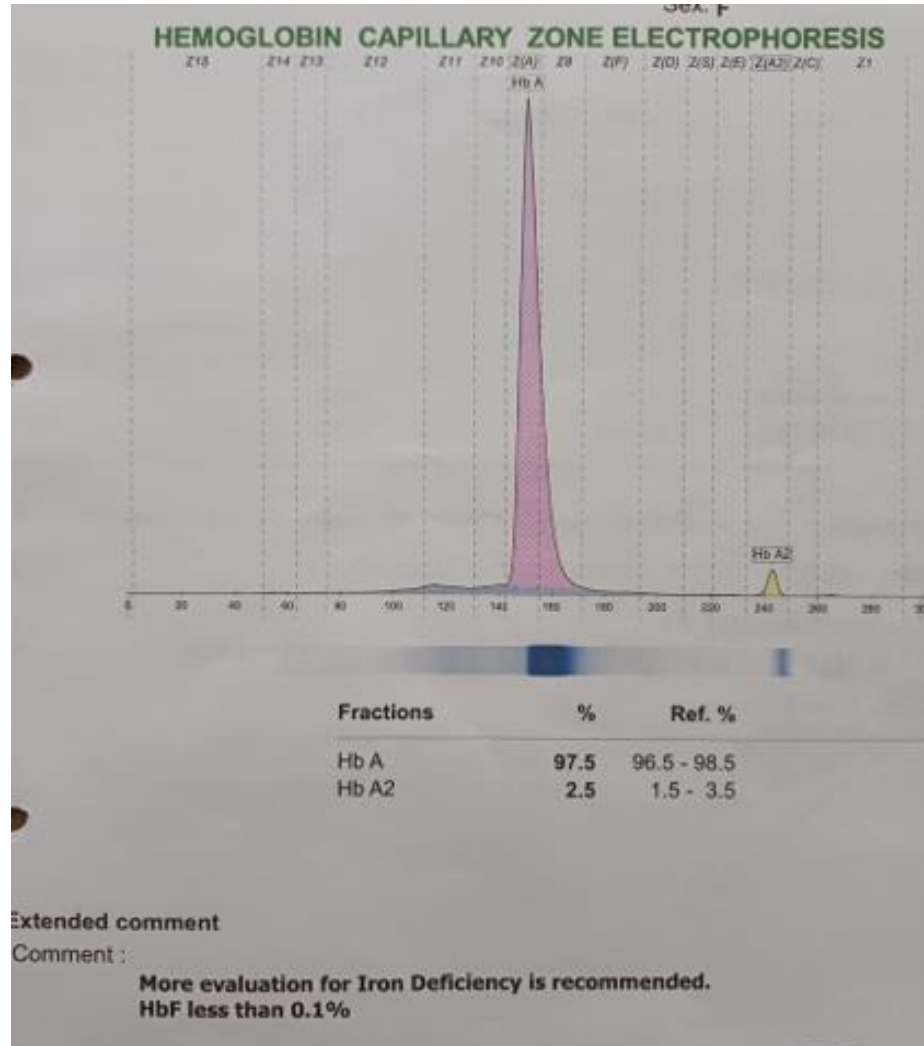
# Lab Data

1402.06.29

WBC 5.9	HBs Ag POSITIVE	FBS 77
NEU:58% LYM:34%	VDRL NEG	BUN 8
RBC 4.6	COOMBS NEG	CR 0.8
HB 11.5		
MCV 77		
PLT 156		

# HEMOGLOBIN ELECTROPHORESIS

1402.07.03





# Pregnancy Sonography (Anomaly scan)

1402.08.01

## Pregnancy Sonography (Anomaly scan) :

- Number of fetus : Single
- Amniotic Fluid : Normal
- Presentation : Transverse
- Placenta : Anterior
- Sex : male
- Cervical length ( TA ) = 41 mm

Fetal Biometry	
BPD	41mm : 18W + 4D
HC	159mm : 18W + 5D
AC	140mm : 19W + 2D
FL	28mm : 18W + 5D
Humorous	28mm : 19W + 2D
Gestational Age by sono	18W + 6d
EFW	271gr ± 10%
EDC	2024/03/19 ± 10 d
EDC	1402/12/29 ± 10 d

Soft markers	
Nuchal fold thickness : 2.6 mm	NL
Nasal Bone length : 5 mm	NL
Ventriculomegaly	Not seen
Hyper echogenic Bowel	Not seen
Echogenic Intracardiac Focus	Not seen
Choroid plexus cyst	Not seen
Mild Pyelectasis	Not seen
Short Femur & Humorous	Not seen

دکتر حسن مرتضائی  
 رئیس رادیولوژی و سونوگرافی  
 ۱۳۰۲۲۰۰

Fetal Anatomy				
		Normal	Abnormal	Comment
Head, neck & face	Skull ( Shape- Integrity )	"		
	Lateral ventricle	6.8 mm		
	Choroid plexus	"		
	Cavum septum pellucidum	"		
	Midline falx	"		
	Cerebellum	18.9 mm		
	Cisterna magna	4.4 mm		
	Lips & Nostrils	"		
Thorax	Nasal Bone	5 mm		
	Orbits	"		
	FHR = Regular	151 bpm		Fetal echocardiography is suggested if clinically is indicated
	Heart Position & Size	"		
Four chamber view	"			
Lungs	"			
Abdomen & Pelvis	Integrity of Diaphragm	"		
	Abd, wall & Cord insertion	"		
	Stomach	"		
	Kidneys	"		
	Urinary Bladder	"		
Spine	Umbilical cord vessel number	"		
	Appearance	"		
Extremities	Upper & Lower Long Bones	Present <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>	
	Hands & feet	Present <input checked="" type="checkbox"/>	Normal Relation <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>

# Sonography

1402.09.12

Liver has normal size but coarse and heterogeneous.

The image of a mesenteric lymph node measuring 36 mm is evident in the hilum of the liver, which is in favor of abdominal lymphadenopathy.

Evaluation of liver parenchymal diseases is recommended.

Dilation was not seen in the intrahepatic and extrahepatic bile ducts. The portal vein and hepatic veins have normal diameter and flow.

The volume and wall of the gallbladder is normal.

There were no signs of stones, sludge, or wall thickness in the gallbladder.

The image of a hyperechoic lesion with a diameter of 2.5 mm is evident in the gallbladder, which can indicate a polyp.

در سونوگرافی انجام شده از کبد و کیسه صفرا :

اندازه کبد طبیعی و اکوژنیسته آن **Coarse** و هتروژن است .

تصویر لنف نود مزانتریک در هیپوگاستر در کبد دیده شد . این کبد در هیپوگاستر با تکیه بر شکم می باشد .

بررسی از نظر بیماری های پارانشیمال کبد توصیه می شود .

اتساع در مجاری صفراوی داخل کبدی و خارج کبدی دیده نشد .

ورید پورت و وریدهای کبدی دیامتر و فلوی نرمال دارند .

حجم و جدار کیسه صفرا طبیعی است .

در کیسه صفرا علامتی از سنگ و اسلاژ و ضخامت جدار دیده نشد .

تصویر ضایعه هیپراکو به دیامتر ۲/۵ میلیمتر در کیسه صفرا مشهود است که می تواند مطرح کننده پولیپ

باشد .

# Lab Data

1402.09.19

WBC 8.2	CA 19-9 38.9
NEU:67% LYM:25%	AFP 208
RBC 4.1	AST 34
HB 10.7	ALT 27
MCV 81	ALP 219
PLT 186	Billi.T 1.1
	Billi.D 0.5
	PT 14.4
	INR 1.1

# FEEDBACK

Dear Professor:

Thank you for introducing the patient. The patient was presented at the joint meeting of the commission and the grand round. The patient's documents were seen. After discussion and debates with our gastroenterologist colleagues and review of references and literatures, the following advisory decisions were made, which are announced to you for your information, help and, if you consider it appropriate, to apply:

Considering the appropriate therapeutic response to tenofovir as well as the gestational age, continuation of pregnancy is recommended and therapeutic abortion is not indicated.

It is recommended to continue the treatment by TDF.

During pregnancy, in terms of maternal and fetal complications of tenofovir, be under the care of a gynecologist.

The newborn should receive immunoglobulin as soon as it is born and within the first 12 hours, and the hepatitis B vaccination should also start.

In the case of the mother, after the delivery, endoscopy was recommended to check for evaluation of esophageal varices. Doppler of abdominal veins, should also be done.



# A 48-year-old woman

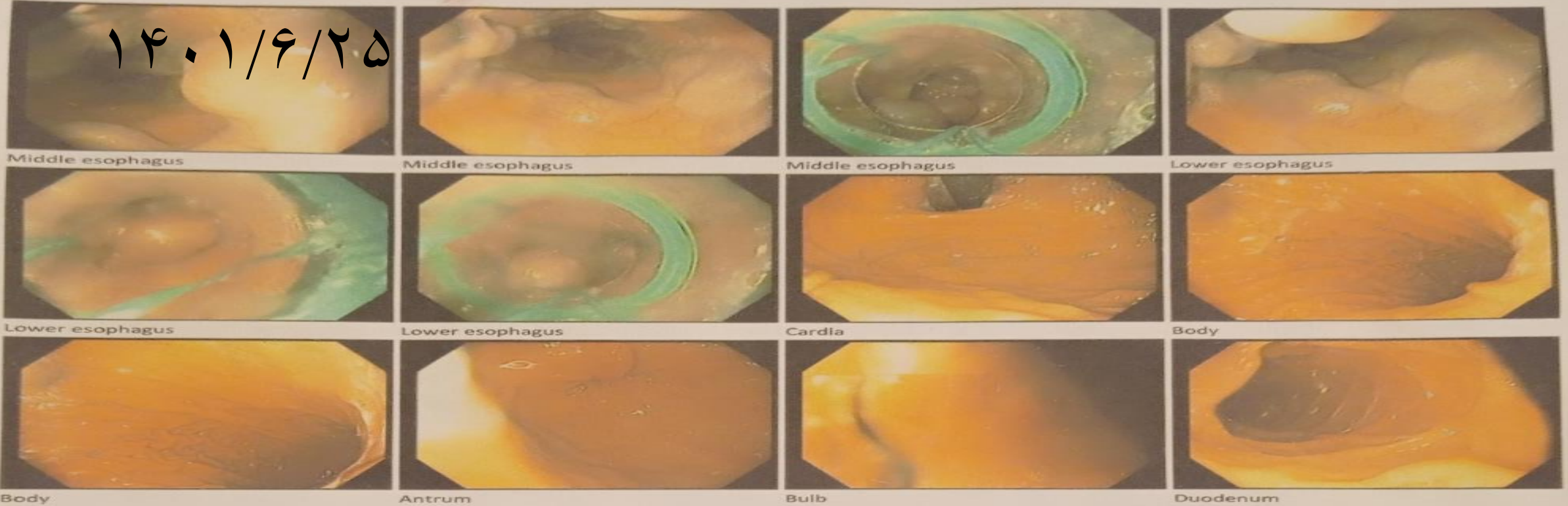
She has been suffering from swelling and cyanosis of the fingers, abdominal pain and generalized itching since 2016. During the tests, she found myelofibrosis positive for JAK2, and in the tests she found splenomegaly and chronic thrombosis of the portal vein. She was prescribed hydroxyurea and warfarin for 5 years.

Ultrasound of 2018: chronic thrombosis of portal vein and spleen 202 mm

In 2021, A hematologist stopped the patient's warfarin and hydroxyurea, after which he underwent an endoscopy due to abdominal pain, and they found esophageal varices.

Then ruxolitinib 15mg tablet be started.

۱۴۰۱/۶/۲۵



**Reason for endoscopy:** Hx of portal vein thrombosis/evaluation of Esophageal varice

**Premedication:** Midazolam 3mg

**Description of procedure:** The video endoscope was introduced up to the Duodenum with the following findings:

**Esophagus:** There were 4-5 rows esophageal varice F3 in middle and lower thirds. 7 esophageal rubber band ligation were applied.

**Stomach:** Fundus: No fundal varice was seen.

Body: diffuse patchy erythema and erosions were seen. (Portal hypertensive Gastropathy)

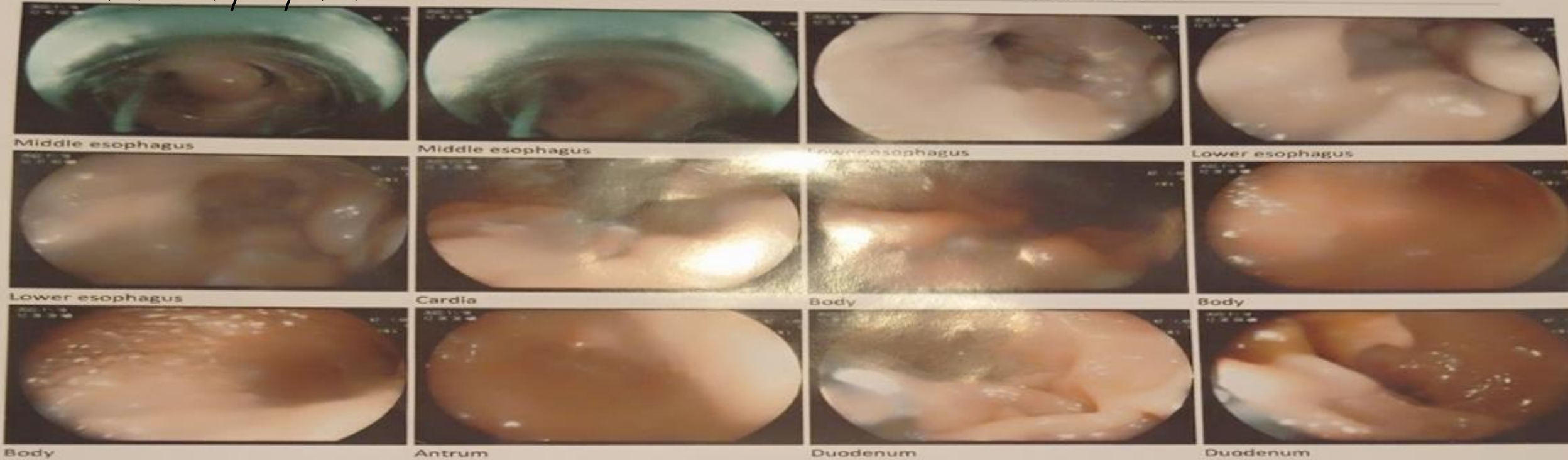
Antrum: a few erosions were seen

**Duodenum:** NL

**Diagnostic and therapeutic operations:** Endoscopic variceal ligation (EVL)/Portal hypertensive Gastropathy

**Recommendation:** Reendoscopy 4 weeks later

١٤٠١/٨/٢٧



**Reason for endoscopy:** Hx of Esophageal variceal ligation/endoscopy surveillance

**Premedication:** Midazolam 3mg

**Description of procedure:** The video endoscope was introduced up to the Duodenum with the following findings:

**Esophagus:** There were 3 rows esophageal varices F3.without bleeding stigma.5 rubber band were applied

**Stomach:** Fundus:No fundal varice was seen

**Body:**NI

**Antrum:**NL

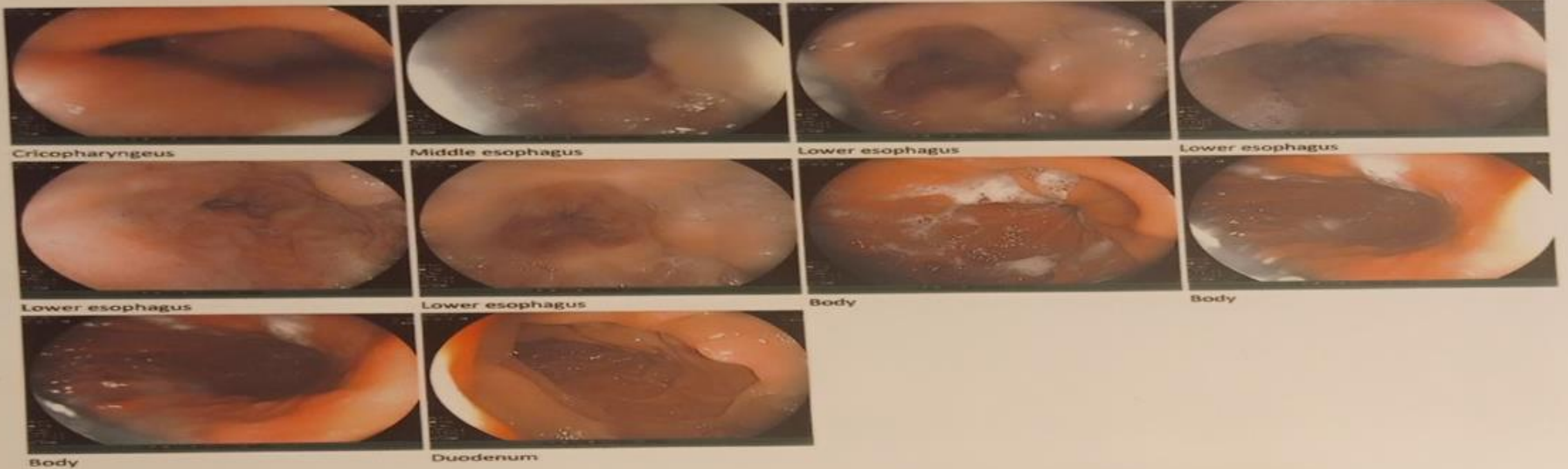
**Duodenum:** NL

**Diagnostic and therapeutic operations:** Esophageal varice/ (EVL)

**Recommendation:** Endoscopy 1months later



١٤٠٢/٣/٣١



**Reason for endoscopy:** Hx of esophageal variceal ligation/endoscopy surveillance

**Premedication:** Midazolam 3mg

**Description of procedure:** The vide endoscope was introduced up to the Duodenum with the following findings:-

**Esophagus:** There are 4 rows of esophageal varice F2-F3 in middle and lower thirds .Three esophageal band were applied

**Stomach:** Cardia:small size Sliding hiatal hernia

Fundus:NI

Body:NI

Antrum:NI

Duodenum: NI

**Diagnostic and therapeutic operations:** See as above

**Recommendation:** Reendoscopy after 2months

۱۴.۲/۹/۹



**Reason for Endoscopy :** Hx of esophageal varice/portal thrombosis/jak2/mutation disease

**Premedication :** By Anesthesiologist

**Description of procedure :** The scope was introduced up to the duodenum;

**Findings :**

**Esophagus :** Ther were 5-6 rows of large esophageal varice F3 in middle and lower thirds.Six rubber band were appllied

**Stomach :** Cardia;NI

Fundus;No fundal varice was seen

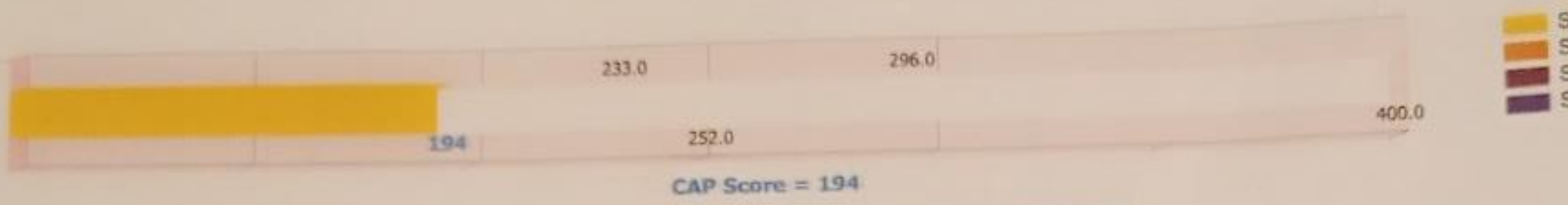
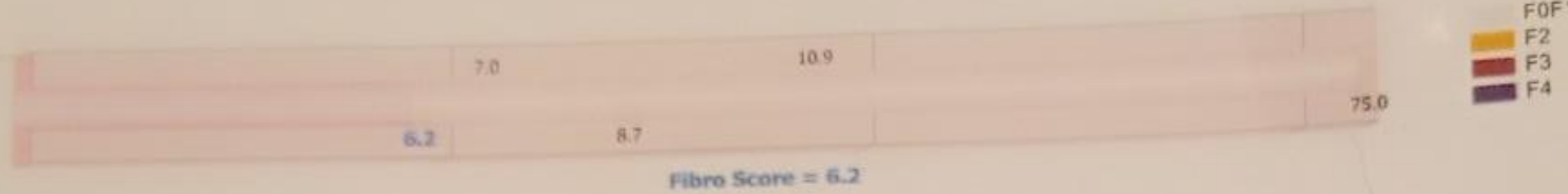
Body;mosaiic pattern.patchy erythema was seen.

Antrum:

**Duodenum :** NL

**Diagnosis :** Esophageal varice(Esophageal variceal ligation)

**Recommendation :** Reendoscopy in one month later/ppi



Fibroscan	CAP
Patient Score: <b>6.2 (kPa)</b>	Patient Score: <b>194 (dB/m)</b>
Metavir Score: <b>F0F1</b>	Steatosis Percent <b>0 - 10%</b>
	Steatosis Stage: <b>S0</b>

Dear Colleague:

Thanks for referring this patient for fibroscan test.

I performed fibroscan in different parts of his liver. The median fibrosis score of his liver is **6.2** kPa, which is equal to **F0F1** based on Metavir histological index.

Please be advised in acute hepatitis, PHT status and cardiopulmonary congestion, result of fibroscan may be higher than the actual fibrosis of the liver.

Regards

۱۴۰۲/۴/۴

### سونوگرافی : شکم و لگن

span کبد در خط مید کلاویکولار 133mm نرمال است . در پارانشیم کبد ضایعه فضاگیر مشهود نیست .  
افزایش خفیف اکوی پارانشیمال کبد دیده می شود. ( early stage of Fatty liver )  
قطر CBD نرمال است . مجاری صفراوی کالیبر طبیعی دارد .  
قطر وریدی 5mm که فلوی عروقی داخل آن مشاهده می شود. که به احتمال ترمبوز قبلی لومن آن کاهش یافته است.  
عروق Coltral اطراف ورید پورت مشاهده می شود  
تصویر دو سنگ در گردن کیسه صفرا به اقطار 2.4mm, 1.8mm مشاهده می شود.  
تصویر یک ناحیه هایپر اکو در جدار خلفی کیسه صفرا به ابعاد 4.5mm مشاهده می شود که مطرح کننده پولیپ می باشد.  
طحال به دیامتر طولی 200\*139mm (Huge splenomegaly) دیده شد .  
در حد حساسیت سونوگرافی در پانکراس و آئورت و پارائورت ضایعه ای دیده نشد.  
کلیه ها دارای حدود، شکل، محل و ابعاد طبیعی هستند. ضخامت و اکوی کورتکس کلیه ها نرمال است.  
کلیه راست به طول 105mm و ضخامت 13mm مشاهده شد.  
کلیه چپ به طول 107mm و ضخامت 16mm مشاهده شد.  
ضایعه فضاگیر solid دیده نشد. هیدرونفروز و یا علائم سنگ ادراری مشاهده نگردید .  
ضخامت جداری مثانه نرمال است. در داخل مثانه سنگ و یا ضایعه فضاگیر مشاهده نگردید.  
ابعاد و نمای سونوگرافیک تخمدانها نرمال است .  
رحم دارای ابعاد 92\*54mm مشاهده می شود. اکوی میومتر رحم طبیعی است.  
تصویر یک میوم اینترامورال قدامی به ابعاد 33\*26mm در رحم مشاهده می شود.  
ضخامت اندومتر 6mm می باشد.  
نابوتین کیست به قطر 16mm در سرویکس مشاهده می شود.  
کلدوساک خلفی مایع مشاهده می شود.

### ***Spiral CT Scan Of The Thorax with & without contrast***

***Technique:*** Plain axial 16-Detector multislice CT scan of the thorax with administering intravenous contrast has been performed with retrospective 2D multiplanar reconstruction. The study reveals:

#### ***Finding:***

*Cardiac size seems normal.*

*Lung parenchyma is clear with no active infiltration.*

*No mass lesion is seen as primary or secondary in lung fields.*

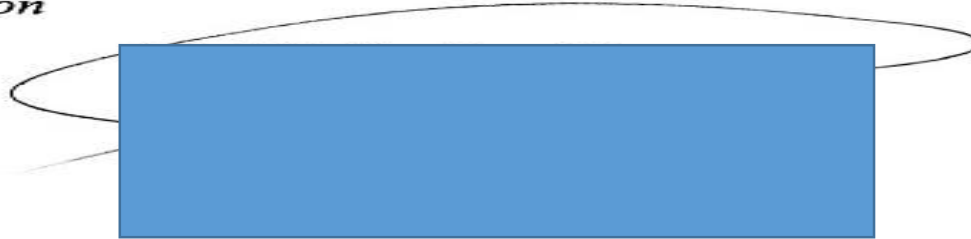
*No hilar or mediastinal mass or adenopathy is present.*

*Pleural cavity is intact.*

*Bony thorax is normal.*

#### ***Conclusion:***

- *No Lung mass or infiltration*
- *No mediastinal LAP*



۱۴۰۲/۷/۵

***Spiral CT scan of the Abdomen and Pelvic with & without Contrast***

***Technique:*** Plain axial 16-Detector multislice CT scan of the abdomen and pelvic after administrating intravenous contrast in portal phase and oral contrast has been performed with retrospective 2D multiplanar reconstruction. The study reveals:

***Finding:***

Liver is normal in size, shape and density with no space occupying lesion .

- Portal vein was not seen obviously (chronic thrombosis).
- There are multiple serpiginous and varices veins in bed of portal vein in favor of cavernous transformation are present.
- There are multiple varices veins at porta hepatis, neck of gallbladder, perigastric, distal of esophagus and perisplenic.

Intra and extra hepatic bile ducts are normal.

Pancreas is also normal with no S.O.L.

- Huge splenomegaly is seen (Spleen span=225mm)

Both kidneys show normal size and position with normal parenchyma and normal opacification.

No hydronephrosis is noted.

Renal or ureteral stone is not seen.

No paraaortic or paracaval adenopathy is present.

Pelvic organs are normal.

- Gastric wall thickening in antrum is seen , endoscopy for further evaluation is recommended.
- Few free fluid in pelvic cavity is seen.

***Conclusion:***

1. Chronic portal vein thrombosis
2. Portal cavernous transformation
3. Huge splenomegaly
4. varices veins at distal esophagus, gallbladder neck, perisplenic
5. No liver mass
6. Few pelvic free fluid

تجف آباد ، خیابان امام شرقی ، جنب پمپ بنزین میلم تمار  
سونوگرافی : ۰۲۱-۴۲۶۴۱۱۲ ام آر آی : ۴۲۶۴۱۱۷

مرکز تصویربرداری پزشکی نسکانجف آباد  
دکتر  
پوریا

۱۴۰۰/۵/۶

## MRCP

- Huge splenomegaly is seen.
- Multiple serpiginous and tubular signal voids in upper abdomen and hepatic hilum are seen.
- The findings can be due to chronic portal vein thrombosis with cavernous transformation and Porto systemic collateral veins.
- Gall bladder wall thickening are seen can be due to gall bladder wall varices, but correlation with clinical findings is recommended for R/O cholecystitis.
- Small stone is seen in gall bladder.
- Intra and extra hepatic bile ducts show no dilatation.
- No CBD stone is evident.
- Pancreatic duct ectasia is not seen.
- Liver, pancreas and kidneys appear normal.

۱۴.۲/۱/۲۷

**CLINICAL DATA: Exclusion of Malignancy**

**PROCEDURE:**

The patient received an intravenous dose of **348 MBq** of fluorine-18 Fluorodeoxyglucose (FDG). Positron emission tomographic (PET) images from **skull-base to mid thigh** were then acquired after a **one-hour delay**. Also, acquired was a contemporaneous low dose non-contrast CT scan performed for attenuation correction of PET images and anatomical localization. The PET and CT images were digitally fused for display. All images were acquired on a combined PET-CT scanner unit. The CT quality of low-dose PET/CT study is not intended to replace the diagnostic CT quality used for clinical purposes. The patient received oral hydration.

**CODING: Exclusion of malignancy**

**Mediastinal bloodpool SUV: 1.65**

**Liver blood pool SUV: 2.22**

**Blood Glucose level: 129 mg/dl**

**FINDINGS:**

**Head and Neck:**

**Small cervical lymph nodes with mild FDG uptake are observed at bilateral cervical zone Ia, likely inflammatory in origin (SUVmax up to 1.73). Non-FDG-avid, normal size and shape lymph nodes are seen in bilateral cervical zone III and also left supraclavicular region. Physiologic uptake is seen in the salivary glands and tonsils. Small cervical lymph nodes without significant FDG uptake are observed at bilateral zones II and III.**

**Thorax:**

**Lungs: No abnormal FDG uptake is visualized in the lung fields. Hyperdense, non-FDG-avid, slightly enlarged bilateral hilar lymph node is observed as old inflammatory reaction.**

**Mediastinum & Axillae: No abnormal FDG uptake is found in the mediastinum.**

**Non-FDG-avid subcentimetric lymph nodes are seen in prevascular regions.**

**No abnormal FDG-avid, axillary lymph node is detected. Mild dilatation of lower third of thoracic esophagus is observed with normal FDG uptake.**



Referring Physician: Dr. Khosravi

### **Abdomen & Pelvis:**

**Liver and Spleen:** Normal activity is present in the liver. **The spleen is very enlarged with homogeneous FDG activity (MTD: 230mm). Non-FDG-avid subcentimetric left subphrenic lymph nodes are observed.**

**Gastrointestinal\ Peritoneal\ Retroperitoneal regions:** Physiologic uptake is seen in the gastrointestinal system. A few non-FDG-avid 4-5mm lymph nodes are seen in aortocaval and paraaortic regions. **Significant dilatation of vessels in upper abdominal area is observed showing normal FDG activity.**

**Genitourinary system:** Physiologically excretion is observed into the urinary system.

**Other abdominal viscera:** Adrenal glands, pancreas and other viscera show normal appearance without abnormal uptake.

**Pelvis:** No abnormal uptake is seen in the soft tissue structures and bone. Bilateral inguinal lymph nodes without FDG uptake are visualized showing normal configuration.

### **Musculoskeletal system:**

No abnormal uptake is seen throughout the musculoskeletal system.

### **Impression:**

- **No evidence of metabolically active malignant lesion is noted throughout the body.**
- **Huge splenomegaly ,with normal metabolic activity .**

Yours Sincerely,  
M. Alavi, MD



S. Mortazavi, MD

۱۴.۲/۸/۲۸

*As your request, Doppler sonography of portal system was performed and findings are as following:*

- *Liver is normal in span (122.62 mm), but echogenicity of the parenchyma is inhomogeneously increased suggesting of patchy fatty liver.*

Reference values	Grade I(S1)	Grade II(S2)	Grade III(S3)
B-Mode Ratio cut-off value	1.49	1.86	2.2



- *B-mode ratio (Hepatorenal ratio) = 1.87: Early phase of S2 → confirms Moderate liver steatosis*
- *Contours are regular.*
- *No obvious space occupying lesion (S.O.L) is seen.*
- *There is no obvious evidence of intra- or extra- hepatic biliary ectasia.*
- *CBD diameter is within normal range.*
- *Hepatic vein system is normal in diameter and gray-scale characteristics.*
- *Gall bladder has normal size and wall thickness.*
  - *In dependent portion of mid-body there are two adjacent echogenic structures with diameters of about 4.34 mm and 3.29 mm, suggesting of non-calcified GB stones.*
  - *Sonographic Murphy sign is negative.*
- *Spleen has span of about 194.65 mm, which is obviously greater than normal. No obvious S.O.L is detected in it.*
- *Main portal vein diameter: 7.62 mm (normal).*
  - *In “color doppler survey” of the main portal vein, no obvious flow is detectable, but in “Angioplus color survey”, small flow could be visible within lumen of portal vein suggesting of partial obstruction of main portal vein.*
  - *Collateral vessels are also visible in liver hilum.*
  - *PSV in main portal vein: 15.92 cm/sec*
- *Splenic vein, inferior mesenteric vein and superior mesenteric vein seem to be intact without obvious thrombosis ; thrombosis involved mainly main portal vein at the site of liver hilum.*

- **Liver, gallbladder and spleen are mentioned in the color doppler report.**

---

- **Pancreas and para-aorta are normal.**
- **Both adrenal regions are unremarkable.**
- **Right kidney is visible in normal anatomic position with normal size (104.15 x 36 mm), shape and regular contours.**
  - ✓ **Parenchymal echogenicity and thickness (in anterior aspect of mid-portion = 12.89 mm) are normal.**
  - ✓ **Corticomedullary differentiation is normal.**
  - ✓ **Echogenicity of the central sinus is normal.**
  - ✓ **Pelvicalyceal system is normal.**
  - ✓ **There is no evidence of obvious renal stone or hydronephrosis.**
    - **Dedicated color evaluation by "color twinkle mode" reveals no focus of "positive color twinkle sign" indicative of no obvious detectable renal stone.**
- **Left kidney is visible in normal anatomic position with normal size (115.44 x 44 mm), shape and regular contours.**
  - ✓ **Parenchymal echogenicity and thickness (in anterior aspect of mid-portion = 18.69 mm) are normal.**
  - ✓ **Corticomedullary differentiation is normal.**
  - ✓ **Echogenicity of the central sinus is normal.**
  - ✓ **Pelvicalyceal system is normal.**
  - ✓ **There is no evidence of obvious renal stone or hydronephrosis.**
    - **Dedicated color evaluation by "color twinkle mode" reveals no focus of "positive color twinkle sign" indicative of no obvious detectable renal stone.**
- **Proximal of both ureters seem to be normal and are not dilated.**
- **Urinary bladder is normal in shape and wall thickness. UVJs are normal.**
  - ✓ **No obvious intravesical focal mucosal lesion or stone is seen.**
- **Uterus has dimensions of about 78 x 45.93 mm with normal axis.**
- **There is an intramural / submucosal uterine myoma in anterior aspect of mid-body measuring about 27 x 22.23 mm.**
- **Endometrium has thickness of about 5.6 mm → consistent with post-menopausal condition.**
- **In "ShearWave elastographic evaluation" of cervix, no increased stiffness is detected.**

➤ **Hepatic artery:**

• **PSV:** 79.52 cm/sec; **RI:** 0.82; **PI:** 1.7; **S/D:** 5.7

➤ **Splenic artery:**

• **PSV:** 130.36 cm/sec; **RI:** 0.76; **PI:** 1.45; **S/D:** 4.1

• **Congestive index** → According to thrombosis of main portal vein, measurement is impossible.

• **Liver vascular index** → According to thrombosis of main portal vein, measurement is impossible.

<b>IMPRESSION</b>	<b>RECOMMENDATION</b>
<ul style="list-style-type: none"><li>- <b>Suggestion of patchy fatty liver</b><ul style="list-style-type: none"><li>• <b>Hepatorenal ratio=1.87: Early phase of S2 (Moderate liver steatosis)</b></li></ul></li><li>- <b>Suggestion of non-calcified GB stones or inspissated sludge without evidence of cholecystitis</b></li><li>- <b>Suggestion of partial thrombosis (recanalization?) of main portal vein + mild collateral vessels (cavernous transformation)</b></li><li>- <b>Suggestion of marked splenomegaly</b></li><li>- <b>Suggestion of compensated portal hypertension</b></li></ul>	

- *No obvious cystic or solid adnexal lesion is seen.*
- *RT ovarian size = 26.61 x 20.14 mm*
- *LT ovarian size = 31.18 x 19.7 mm*
  - ✓ *No obvious prominent follicle is detected in the ovaries.*
- *No free fluid is visible in the abdominopelvic cavity.*

### **IMPRESSION**

- *Suggestion of uterine myoma*
- *Unremarkable post-menopausal condition*

### **RECOMMENDATION**

	1402/2/25	1402/3/16	1402/5/7	1402/7/5	1402/8/20
WBC		4.4		4.3	
RBC		4.5		4.3	
Hb		12		13	
MCV		84		90	
MCH		27		30	
Plt		126000		116000	
AST	27	32	34	47	39
ALT	25	30	41	54	45
Alp		152	164		
Bili-t Bili-d	1.5	2.1	3.9	3.4	3.7
INR					1.2

- Next step?



# FEEDBACK

Dear colleague:

Thank you for introducing the patient. The patient was presented at the joint meeting of the commission and the grand round. The patient's documents were seen. After discussion and debates with our gastroenterologist colleagues and review of references and literatures, the following advisory decisions were made, which are announced to you for your information, help and, if you consider it appropriate, to apply:

Considering the known mutation in the JAK2 gene, it is definitely necessary to continue the anticoagulant according to the opinion of the hematologist.

Continue treatment with non-selective beta-blocker.

EVL should be continued every 3-4 weeks until complete ablation of varicose veins.

Currently, the patient is not a candidate for TIPS.