Evidence-Based Medicine in Action: How Regional Data Transforms Local Clinical Practiice

The Case of Hepatobiliary Complications in Syrian IBD Patients



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Patient Profile

(Patient : M.Y.D, 50Y, M), with panUC, and PSC, (diagnosed 5 years ago)

Initial Disease Course:

- First 2 years marked by frequent bloody diarrhea, tenesmus, and intermittent fever
- Symptoms controlled with multiple treatment courses, leading to deep remission of colonic disease

Progression of Hepatobiliary Disease

- Over the last 3 years, PSC worsened, with recurrent hospitalizations due to fever and jaundice
- Parital responses followed by relapses

Current status

- Developed liver cirrhosis secondary to PSC, unresponsive to standard therapies
- Treatment included UDCA, cholestyramine, budesonide, plus AZA and biologics, but failed to halt progression

This Study Aims To

Prevalence of hepatobiliary manifestations among Syrian IBD

Disease burden and its impact on prognosis

Therapeutic approaches and effectiveness

Suggest recommendations that may benefit these patients

Data Collection VS Data Analysis

$$\gamma$$
 n = $Z^2 \times p \times (1-p) / d^2$

$$Z = 1.96 (95\% CI)$$

p = Expected prevalence
(From literature)

d = Margin of error Common (≥1%): d=5% Rare (<1%): d=3%

Final Minimum Required 265

Design: Retrospective Cohort (2018-2024)

Population:
357 patients (ECCO-confirmed IBD)

Final sample (n=357) > Minimum (n=265)

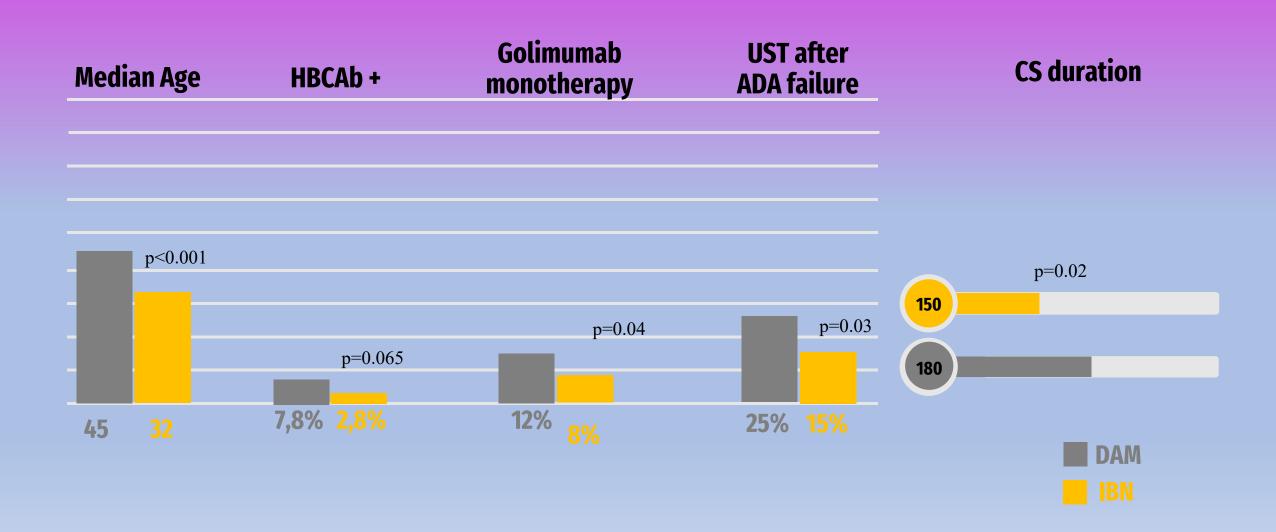
Confirmed power ≥80% for primary endpoints

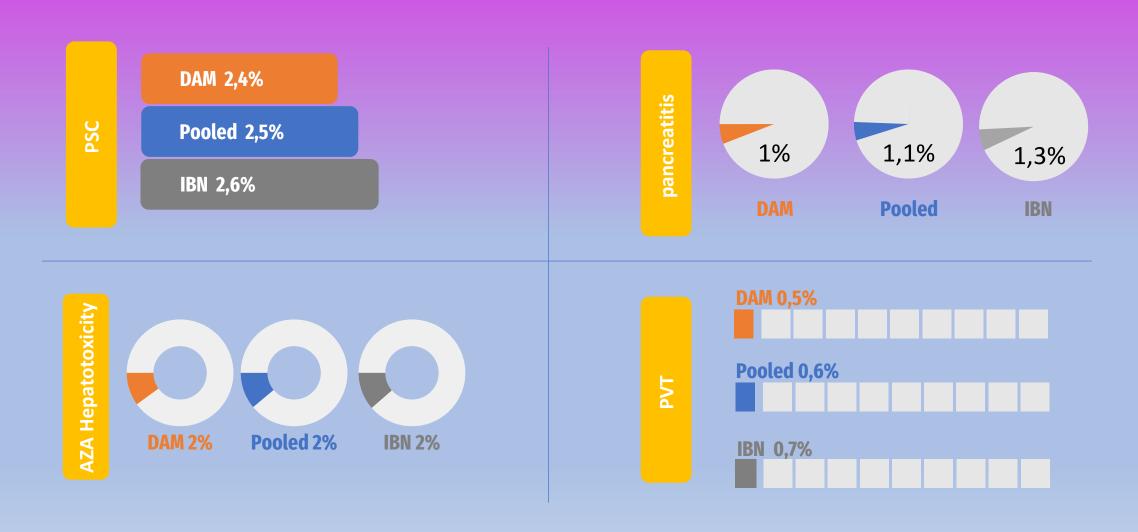
Inflammatory bowel disease
Smoker State Age F M SEX DOB Name
Bio treatment date HBV Diagnosis date CD UC IBD
Treatment HCV-PCR Not Studied Negative Positive Anti-HCV
■ Not Studied ■ Negative ■ Positive Anti-HBc ■ Not Studied ■ Negative ■ Positive HBsAg
Treatment HBV-PCR Negative Positive Anti-HBs
Date ALF Date Acute HBV Date HBVr
■ L4:isolated upper disease ■ L3:ileocolonic ■ L2:colonic ■ L1: ileal CD classification
p perianal disease B3 penetrating B2 stricturing B1 non-stricturing, non-penetrating
Extensive UC Left sided UC E1Ulcerative proctitis UC classification
■ S3 ■ S2 ■ S1 ■ S0
immunodulator loss of Anal Fistula/Diseaes Steroid resistance steroid dependent Biology indication response

Date AZA Date Steroides Treatment
Date GOLI Date ADA Date IFX
Date UST
Tests
Cr INR BIL HGB AST ALT
PSC AIH Pancreatitis AZA-Induced-hepatotoxicity NAFLD
Mesalamin-Induced-hepatotoxicity PVT Liver-abscess
<u>Cholangiocarcinoma</u> <u>Amyloidosis</u> <u>PBC</u>
Other information
S0:Asymptomatic S1:Mild UCPassage of four or fewer stools/day (with or without blood), absence of any systemic illness, and normal inflammatory markers (ESR) S2:Moderate UCPassage of more than four stools per day but with minimal signs of systemic toxicity S3:Severe UCPassage of at least six bloody stools daily, pulse rate of at least 90 beats per minute, temperature of
at least 37.5°C, haemoglobin of less than 10.5 g/100 ml, and ESR of at least 30 mm/h

PatientID	1			Steroides		CR
FileID	8109			SDurationDays		
Patient Name	بعير أبو عباف	HBsAG	False	Azathiopuring	Ture	Note
L		Anti-HBo	False	ADurationDays	120	
Sex	نكر	Anti-HBS		IFX	False	
PState	دمثق			IFXDurationweeks		
Smoker				ADA	False	
IBD	UC	HBV-PCR		ADADurationweeks		
HBVDiagnosisDate [_		Goli	False	
BiotreatmentDate	12/08/2023	Treatment		GoliDurationweeks		
		HBVActivation	False	UST	False	
		HBVrDate	Fase	USTDurationweeks		
		ALF	False			
			Fase			
		ALFDate		AST	16	
Anti-HCV	Negative	CDLocation	L2:Colonic			
HCV-PCR		CDNature		HGB		
L		CDAge				
HCVTreatment		UCLocation		Bil		
L		UCSevirity		INR		
		BiologicIndication		IINE		
PSC	AIH	Pancreatitis		AZA-Induced-hepatotoxicity		
Mesalamin-Induced-	hepatotoxicity	NAFLI		PVT	Liver-abscess	
Cholangiocarcinoma		/loidosis	PBC	INDATE	AGE	

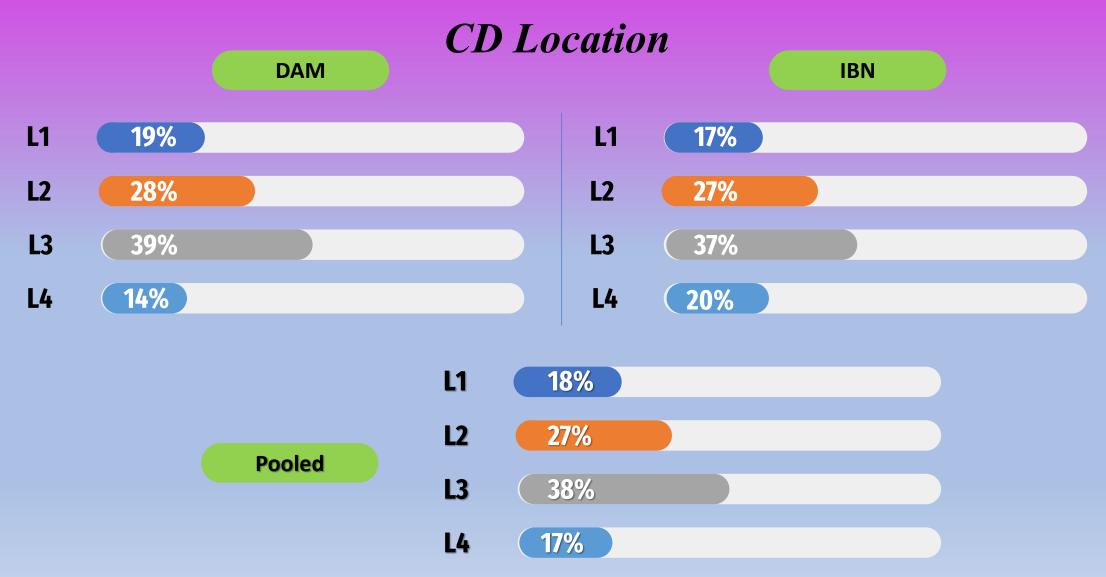
Results... Areas Of Discrepancy

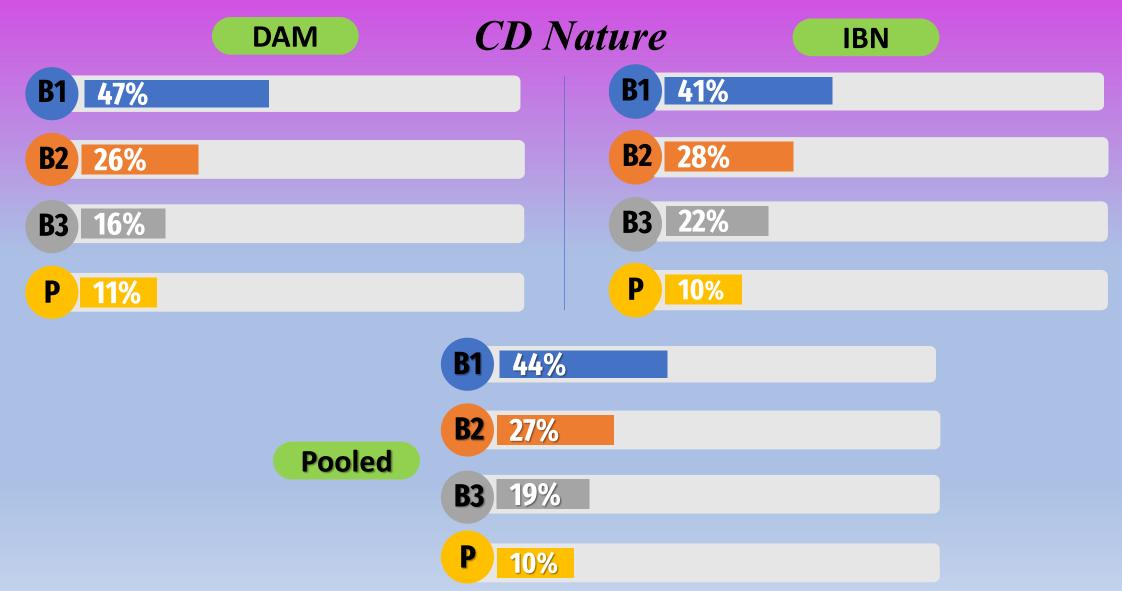




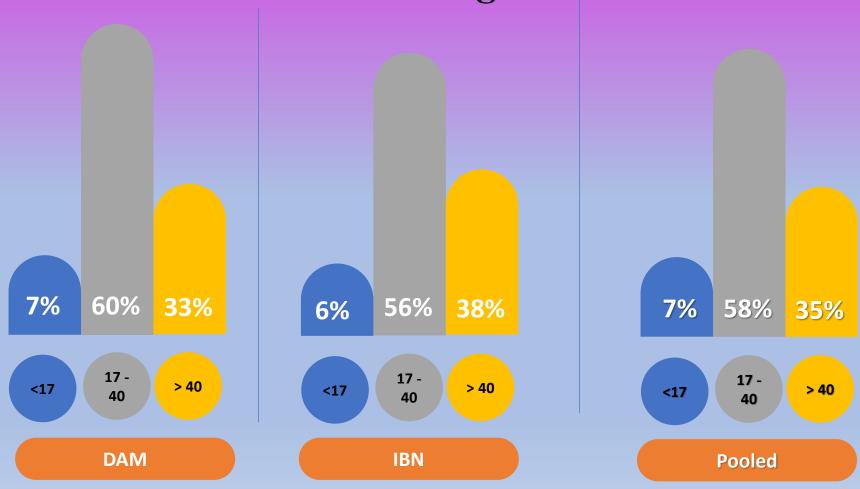
Results... Areas Of Consistency HBV/HCV



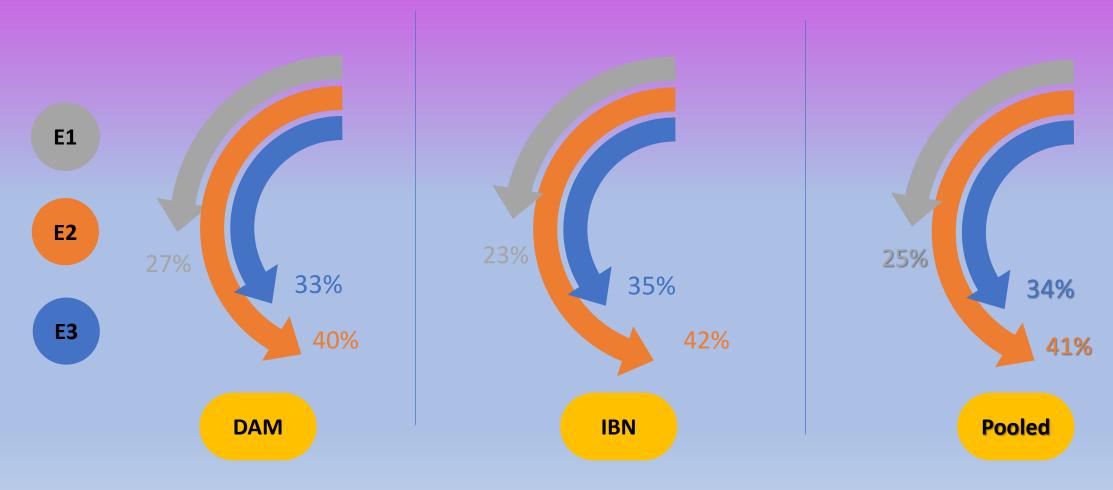




CD Age



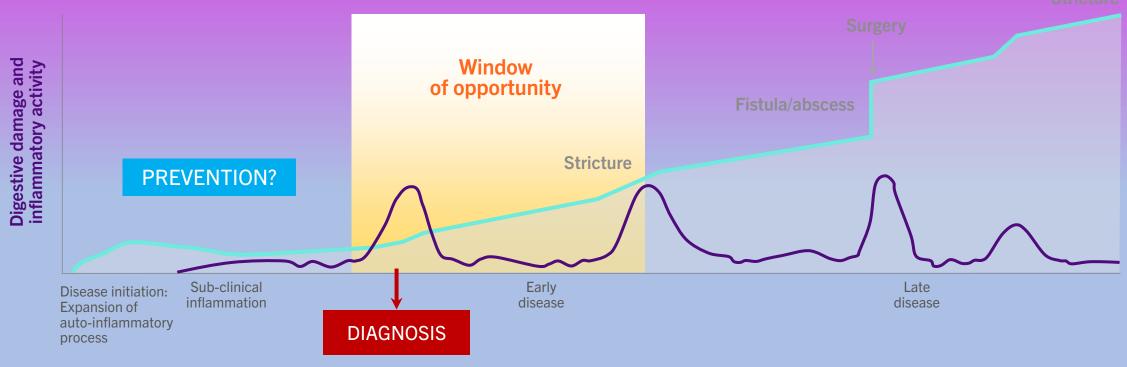
UC Location



Results... Areas Of Consistency UC Severity



Early Effective Treatment During The Window Of Opportunity Could Prevent Disease Progression



- > IBD could lead to irreversible bowel damage without adequate and timely treatment
- > Early intervention is key in defining the right path for long-term remission
- > Still, effective treatment needed in UC and CD to provide adequate control of symptoms and mucosal inflammation (treat-to-target approach)

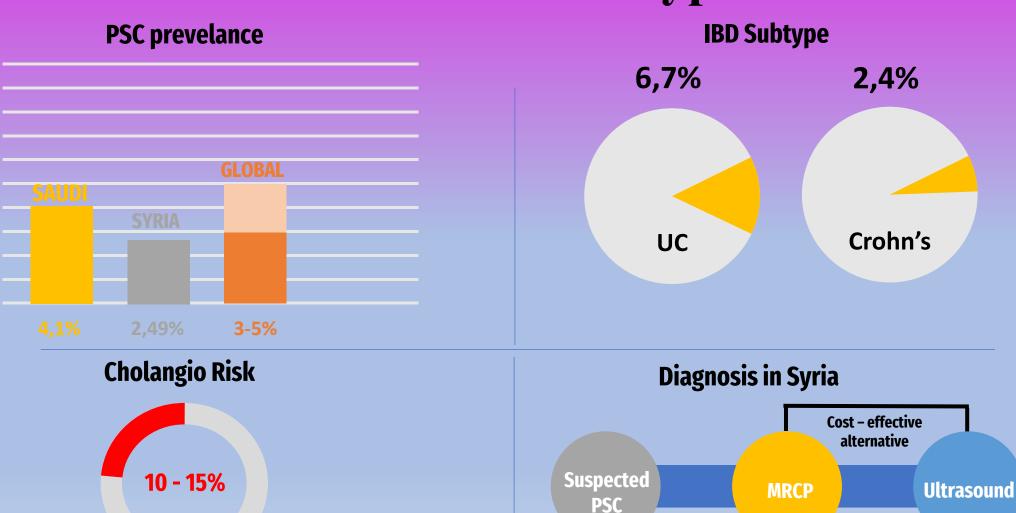
^{1.} Colombel JF et al. Gastroenterology 2017;152:351-361.

Table 2: Statistical Comparison of IBD Treatments: Damascus vs. Iben Al-Nafees

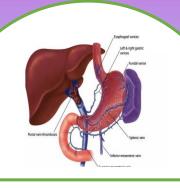
Parameter	Damascus (n=205)	Iebn Al-Nafees (n=152)	p-value	Interpretation
1. BIOLOGIC MONOTHERAPY	55.1% (113)	60.5% (92)	0.28	No significant difference
- Infliximab (IFX)	42% (86)	45% (68)	0.55	Comparable use
- Adalimumab (ADA)	38% (78)	40% (61)	0.69	Comparable use
- Golimumab (Goli)	12% (25)	8% (12)	0.04	More common in Damascus
- Ustekinumab (UST)	8% (16)	7% (11)	0.72	Comparable use
2. BIOLOGIC Second option	32.7% (67)	30.3% (46)	0.62	No significant difference
- IFX + ADA	50% (34)	55% (25)	0.59	Comparable use
- ADA + UST	25% (17)	15% (7)	0.03	More common in Damascus
- ADA + Goli	15% (10)	20% (9)	0.08	Trend toward Iben Al-Nafees
3. STEROID USE	68.3% (140)	62.5% (95)	0.25	No significant difference
- Prednisone	80% (112)	82% (78)	0.71	Comparable use
- Budesonide	20% (28)	18% (17)	0.68	Comparable use
4. STEROID DURATION (days)	180 ± 45	150 ± 60	0.02	Longer in Damascus
5. AZATHIOPRINE USE	52.2% (107)	48.0% (73)	0.42	No significant difference
- Dose (mg/kg/day)	2.3 ± 0.4	2.2 ± 0.3	0.12	Comparable dosing
6. AZATHIOPRINE DURATION (days)	420 ± 120	380 ± 90	0.07	Trend toward longer use in Damascus
7. TREATMENT FAILURE	22% (45)	18% (27)	0.15	No significant difference
- IFX failure	12% (24)	10% (15)	0.52	Comparable rates
- ADA failure	8% (16)	6% (9)	0.41	Comparable rates

^{*(} χ^2 test for proportions; t-test for durations; significance at p < 0.05)*

Primary Sclerosing Cholangitis (PSC) Prevalence And IBD Subtype Association



Portal Vein Thrombosis (PVT) in IBD



Clinical insight

A single reported PVT case in a CD pt with $\downarrow \downarrow \land$ Albu

Inherited or acquired thrombophilic disorders in 50%

(LMWH) is first-line therapy

Challenges: malnutrition, limited healthcare (conflict zone)

active inflammation as a central risk factor

routine screening not recommended

complicate anticoague, and hepatobiliary comorbidities (PSC) in UC & cholelithiasis in CD → multidisciplinary team

Autoimmune Hepatitis (AIH) And Biologic Therapies



Prevalence

Diagnosis

Treatment



Rare in our cohort (single case) complicates IBD treatment (biologics)



In Syria biopsy access limited

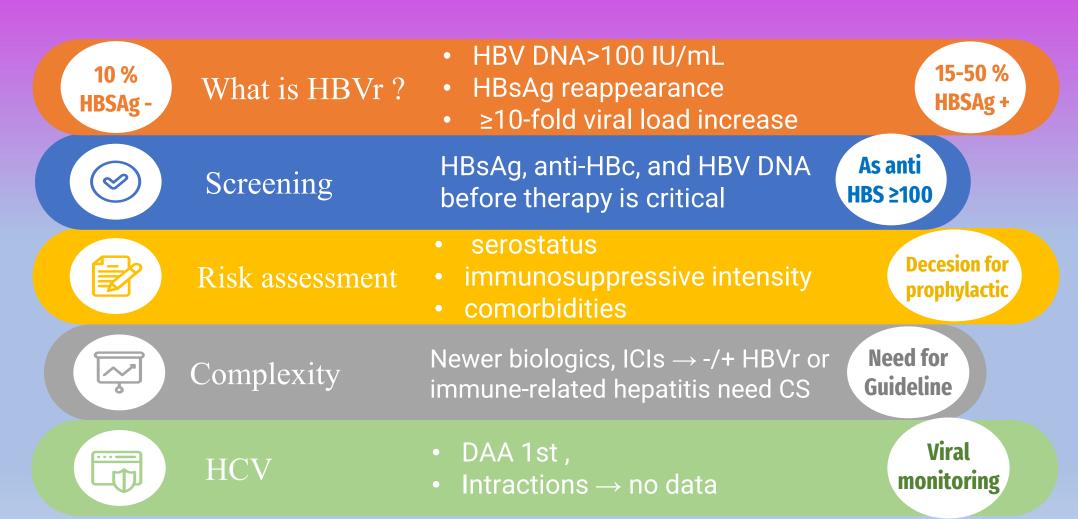
→ non-invasive (simplified AIH)



CS, AZA, (Anti TNFs safe in IBD – AIH overlap)

Biologic – induced AIH maybe but rare

HBV/HCV And Biologic Therapy Challenges



Azathioprine-induced Pancreatitis



AZA - pancreatitis



leukopenia

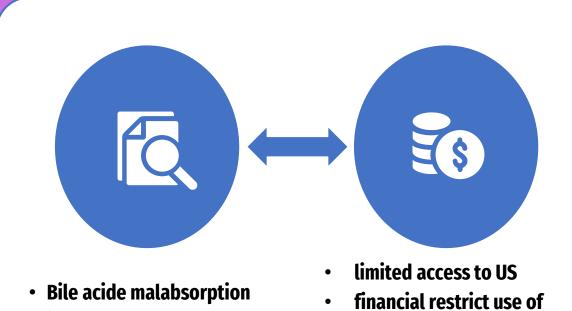
Malnutrition Infections (H.Pylori)



Work up

CBC monitoring Folate supplements

Cholelithiasis In CD



Treatment GAP

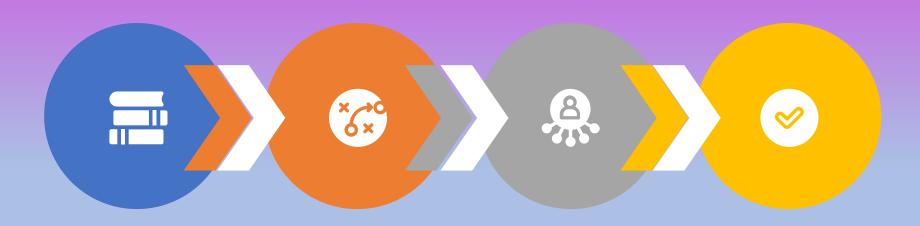
bile acid sequestrants

(cholestyramine))

(Ileocolonic CD 80%)

Underdiagnosed

Metabolic Dysfunction-associated Steatotic Liver Disease (MAFLD)



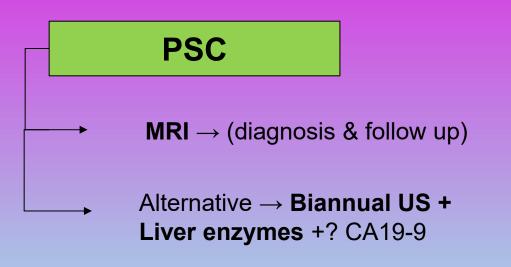
- Metaboic dysfunction
- Chronic inflammation
- Treatment (CS)

- In Syria limited elastography
- Ultrasound, liver tests FIB-4 score

Alternative:

- Lifestyle modification
- Steroid-sparing biologics

From Findings to Action... Study-Based Advice



Nutritional optimization &

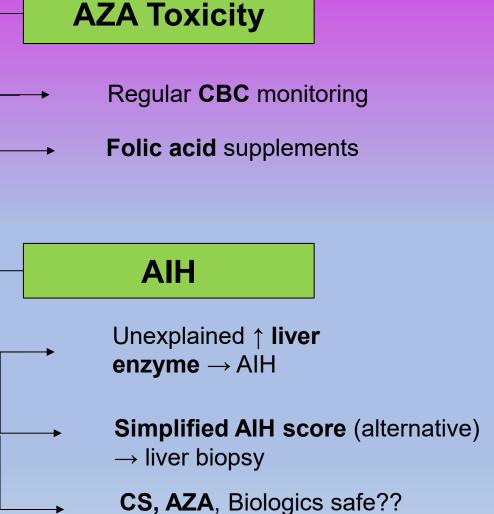
Doppler US \rightarrow (MRI,

CT) unavailable

LMWH, MDT

control of inflammatory activity

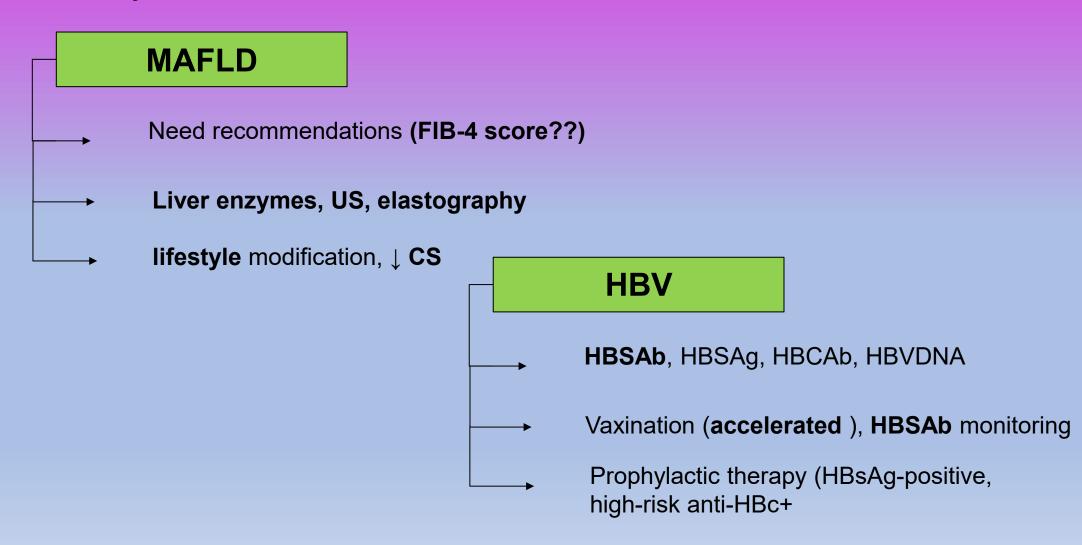
PVT



Cautiously, Paradoxical AIH

Colelithiasis

US annualy



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Multicenter Study

> BMC Infect Dis. 2025 May 4;25(1):652. doi: 10.1186/s12879-025-11063-6.

Prevalence of opportunistic infections in Syrian inflammatory bowel disease patients on biologic therapy: a multi-center retrospective cross-sectional study

Marouf Alhalabi ¹, Hussam Aldeen Alshiekh ², Shadi Alsaiad ³, Mouayad Zarzar ³

Advanced

FULL TEXT LINKS

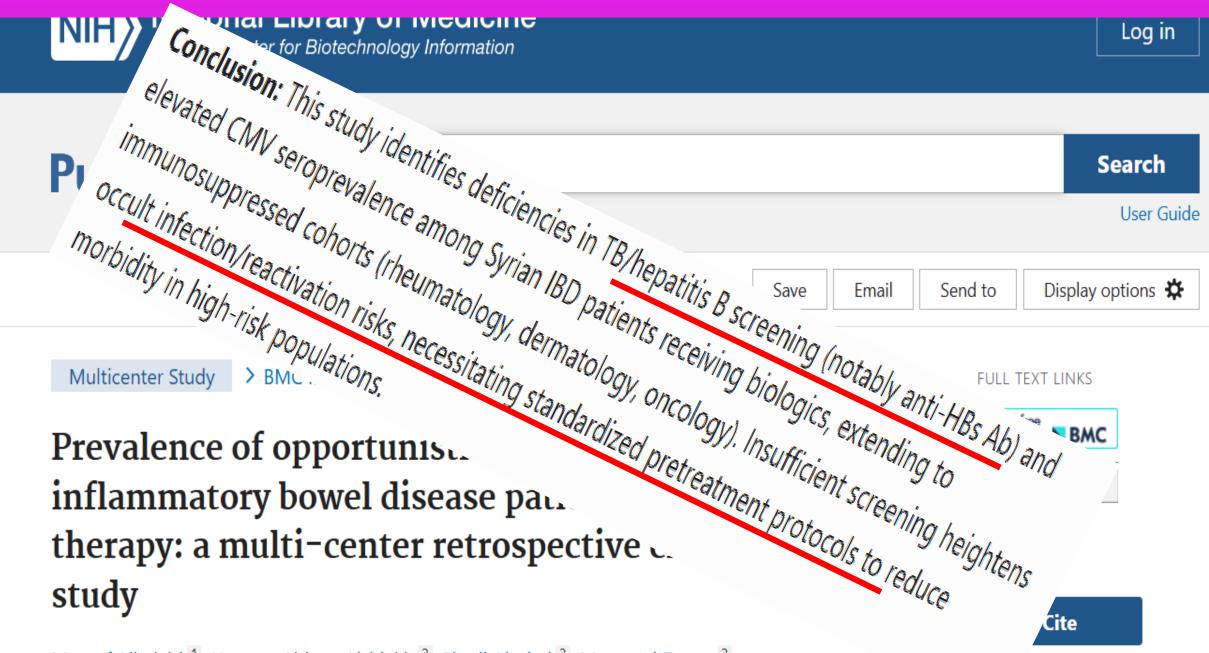




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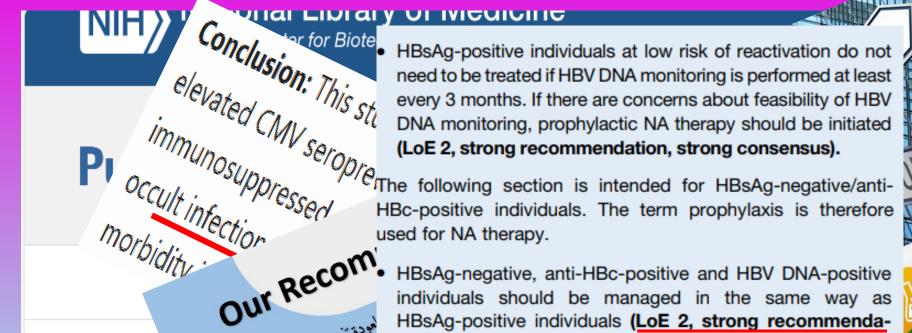




Marouf Alhalabi ¹, Hussam Aldeen Alshiekh ², Shadi Alsaiad ³, Mouayad Zarzar ³

Collections



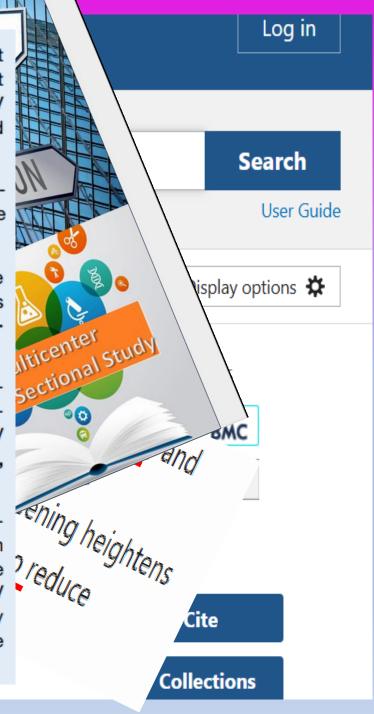


- individuals should be managed in the same way as HBsAg-positive individuals (LoE 2, strong recommendation, strong consensus).
- HBsAg-negative, anti-HBc-positive, HBV DNA-negative individuals should receive prophylactic NA therapy if immunosuppressive therapy associated with a high risk of HBV reactivation is planned (LoE 2, strong recommendation, strong consensus).
- HBsAg-negative, anti-HBc-positive, HBV DNA-negative inwith moderate or low risk of reactivation do not need to be with the reactivation do not need to be with the reactivation do n DNA every 3 months). If there are concerns about feasibility of HBV monitoring, prophylactic NA therapy should be initiated (LoE 3, strong recommendation, consensus).

Alt, Ast, HBSAB, HBSAb, Multicent

Prevaled inflamma therapy: a study

Marouf Alhalabi ¹, Hussa



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				رابق العرضية:
				رايق الجراهية:
				إبق التصسية
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	77)	upah 🖂	، ضرض:	D
Age at diagnosis	Montreal Classification for	upah 🖂	ی العرضی: داه کرون	n symptoms ns aptoms
Age at	Montreal Classification for CD Classification A1×17 years A2: 17–40 years	4 20 □	داء کرون UC Classification S0: remission, no S1: mild sympton S2: moderate sym	symptoms ns aptoms oms ectitis c distal colitis

such as B1p, B2p, B3p

التظاهرات غارج عضمية

1

والمطيريات عثد القبولين

WBC	ESR	RF	CIMIV IgG	
N/L	ALP	ANA	Fecal calprotectin	
HGB	HBs Ag	ASMA.	ALT	
MCV	Anti HBs	Anti LKM-1	AST	
PLTS	Anti HBC	AMA/M2		
CREA	PCR IHBV	Soluble liver		
UREA	Anti HCV	TST		
CRP	PCR HCV	IGRA		

وانتقح التظير الهضمي

 التنظير الهضمي العلوى Upper Gl Endoscopy:
♦ التنظير المضمي السفل Lower Gl Endoscopy.:

الاستقصاءات الشعاعية:

تايكو البطن:
□صورة المدر الرسيطة:
المحبورة الأمعاء الظليلة
تاصورة الرنين المغناطيسين
14 13/13 20
تاثيجة الطبقي المحوري:
الشعلة العلاجية للقترسة
AZA :
S-ASA o
 علاج بيولوجي: (استطباب العلاج البيولوجي وما هو الدواء المحتار)
 الإعقماد على البشر وغذات
 التعنيد على الأدرية المعتلة المناعة
 داء معوى مختلط نواسير داء حول الشرج)
ن تظاهرات خارج معوية أو خارج هضمية
 أمم الدواء البوارجي
:= Infliximab (Remicade):
:: Ustekinumab (Stelara):
:: Golimumab (Simpori):
Adelimumab Ginnora :
n Tofacitinib:
Ξ
 علاجات يولوجية سابقات ومبب تغير اللط العلاجي:
تندم الإستجابة السرغرة
د: انشطاع الدواء وعدم توافره

د تأثيرات جانبية

قسم الحضمية|عيادة الـ IBD

جدول المراقبات المقبرية لمريض الـ IBD

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CREA											
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ALT											
Albumin											
T.Protein											
ALP											
GGT											
LDH											
HBs Ag											
Anti HBc											
Anti HBs											
Anti HCV											
Anti CMV											
TST											
IGRA											
AMA M2											
ANA											
ASMA											
C.Difficile											
F.Calprotectin											
فعص اليول والراسب											
صورة العنر CXR											
معورة البطن AXR											

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IBD JI	الهضمية إعيادة	قىد
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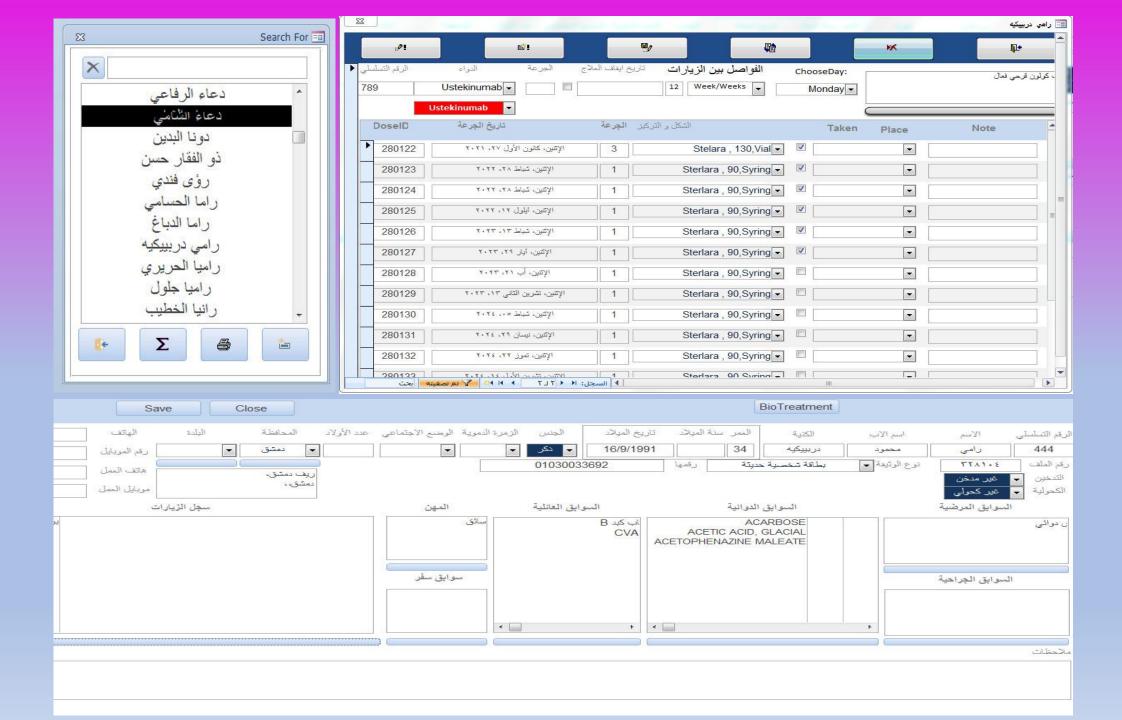
الزيارة الثانية للمريض

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Rectal Bleeding:	CREA	Mayo DAI ft) تحسب من	
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Rectal Bleeding:	CREA UREA AST ALT	Mayo DAI ft) نحسب من	

الزيارة القائنة للعريض، قسم الحضميّة عيادة الـ IBD الم الريض الثلاثي: رقم الإخبارة: طرق الزيارة الثالثة:

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Hgb	ALT		

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	MCV		ALT			
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	F.Calprotectein		Stool Analysis			
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					التطيرة	الانطاع والمقارنة
					إحات:	هالتوصيات والاقترا



Multicenter Study > BMC Infect Dis. 2025 May 4;25(1):652. doi: 10.1186/s12879-025-11063-6.

Prevalence of opportunistic infections in Syrian inflammatory bowel disease patients on biologic therapy: a multi-center retrospective cross-sectional study

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Prevalence and regional disparities of hepatobiliary complications among Syrian patients with IBD: a multicenter cross-sectional retrospective study

Corresponding Author: Marouf Alhalabi

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Your submission is in peer review

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STATUS	ID	TITLE	CREATED	SUBMITTED
☑ Contact Journal	bmjopen-2024-098671.R2	Risk of hepatitis B virus reactivation	11-Oct-2025	13-Oct-2025
EPA: Editorial Office, BMJ Open		associated with interleukin inhibitor therapies: Protocol for a systematic review and meta-analysis		
 Awaiting Reviewer 		View Submission		
Selection		[View Original Files]		
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Rates and cost implications of biologic therapy discontinuation in inflammatory bowel disease at two public hospitals in Syria: A retrospective cross-sectional study.

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BMC Health Services Research

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Contact Journal ADM: Office, Editorial Awaiting Reviewer Selection RHEUMAP-2025-224 Gaps and management implications in pre-biologic therapy screening for Hepatitis B in a conflict-affected Syrian patients: a retrospective cross-sectional study. View Submission Cover Letter	STATUS	ID	TITLE	CREATED	SUBMITTED
ADM: Office, Editorial Syrian patients: a retrospective cross-sectional study. View Submission	☑ Contact Journal	RHEUMAP-2025-224		28-Sep-2025	28-Sep-2025
Awaiting Reviewer	ADM: Office, Editorial				
Awaiting Reviewer					
	Awaiting Reviewer		view Submission		
			Cover Letter		

PROTOCOL

Open Access

Hepatitis B reactivation with TNF-α inhibitors: assessing antiviral prophylaxis efficacy — protocol for systematic review and meta-analysis



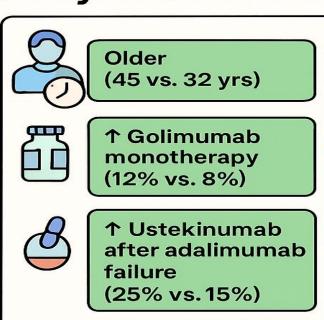
Damascus

Other conclict-

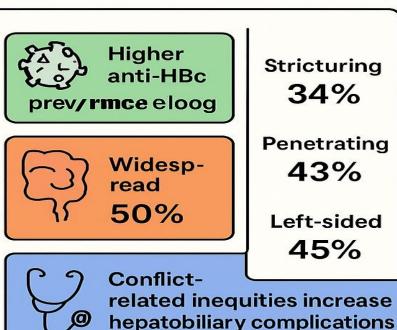
affected region

(pooled)

Previenal Disparities of Hepatobiliary Complications in Syrian IBD Patients



Longer steroid use





Prevalence and regional disparities of hepatobiliary complications among Syrian patients with IBD: a multicenter cross-sectional retrospective study

Corresponding Author: Marouf Alhalabi

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