

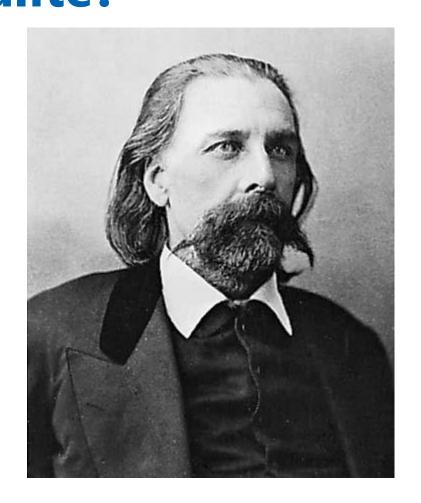
Syndrome de l'intestin irritable: la théorie

Prof. Hubert Piessevaux

12 octobre 2024

Syndrome de l'intestin irritable: une banalité?





A good set of bowels is worth more to a man than any quantity of brains

Josh Billings, AD 1818-1885



SOMMAIRE

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- 2. Epidémiologie
- 3. Facteurs de risque
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- 5. Mise au point
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Définition

Quand il y a des douleurs abdominales chroniques inexpliquées

- Associées à des troubles du transit
- Constipation
- Diarrhée

dont l'intensité est modulée par la défécation

Définition basée sur des symptômes!



Table 1. Rome Criteria for Diagnosing IBS^{2,3}

Rome II, III, IV ...

Rome III Criteria

Recurrent abdominal pain or discomfort at least 3 days/month in the last 3 months associated with two or moof the following:

- Improvement with defecation
- Onset associated with a change in frequency of stool
- Onset associated with a change in form (appearance) stool

^aCriterion fulfilled for the last 3 months with symptom onse at least 6 months prior to diagnosis.

b"Discomfort" means an uncomfortable sensation not described as pain.

Rome IV Criteria

Recurrent abdominal pain, on average, at least 1 day/week the last 3 months, associated with two or more of the following criteria:

- Related to defecation
- Associated with a change in frequency of stool
- Associated with a change in form (appearance) of stoc

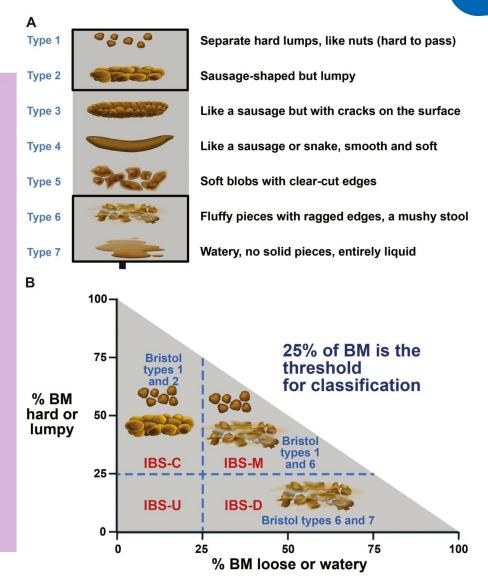
^cCriteria fulfilled for the last 3 months with symptom onset least 6 months before diagnosis.





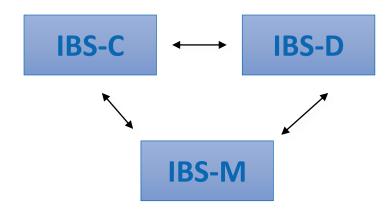
Sous-groupes

SUBTYPE	STOOL TYPE 1 & 2	STOOL TYPE 6 & 7
IBS with predominant constipation	More than 25%	Less than 25%
IBS with predominant diarrhea	Less than 25%	More than 25%
IBS with mixed bowel habits	More than 25%	More than 25%



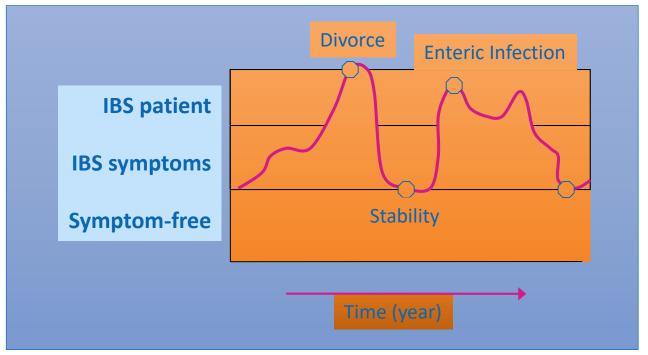


Stabilité dans le temps?

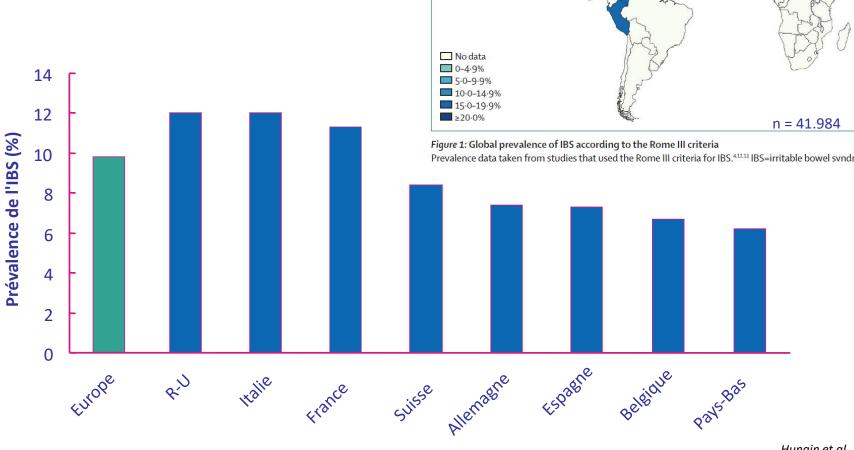


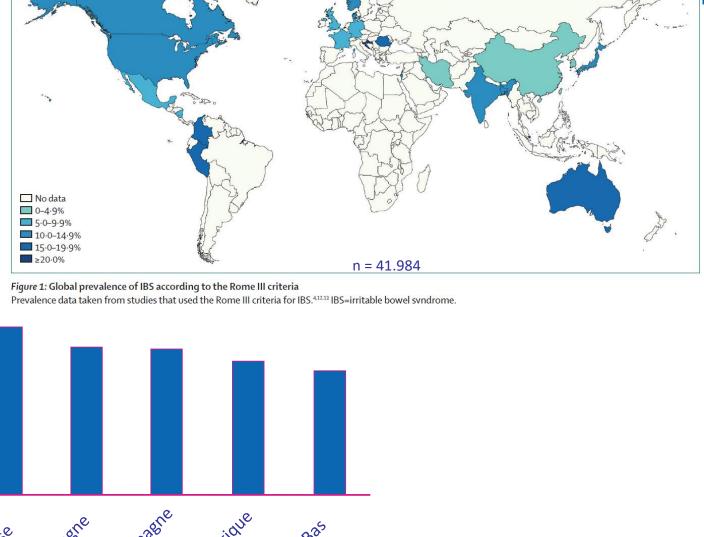
- Proportions de patients stables dans chaque sous-groupe au fil du temps mais
- dans 75% il y a eu un changement au niveau du sous-groupe.

Typical natural history of IBS



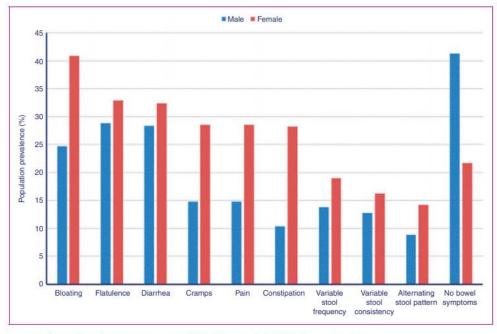
Prévalence







En Belgique?



e 1. Prevalence of bowel symptoms as reported by the general population in men and women.

Table 2. Comparison between patients fulfilling Rome IV criteria and the self-reported irritable bowel syndrome (IBS) group.

	IBS according to Rome IV	Self-reported IBS
Prevalence	5.5%	17.6%
Employment state:		
Employed	63%	45%
Symptoms		
Diarrhea	37%	39%
Constipation	34%	35%
Alternating stool pattern	28%	28%
Abdominal pain	100%	48%
Bloating	74%	65%
Abdominal cramps	69%	51%
Problems with frequency of	49%	27%
bowel symptoms		
Problems with consistency	37%	24%
of bowel movements		

Facteurs de risque

- Sexe F > M
- Age
- Statut socio-économique
- Co-morbidité

Table 5. Pooled Prevalence of IBS According to Age, Gender, and Socioeconomic Status

	No. of subjects	Pooled prevalence of IBS (95% CI)	Odds ratio for IBS (95% CI)
Age band (y)			
<30	6909	11.0 (6.0-18.0)	1.00
30-39	7247	11.0 (7.0-16.0)	1.04 (0.85-1.27)
40-49	7543	9.6 (6.0-14.0)	0.86 (0.59-1.24)
50-59	5434	7.8 (5.0-11.1)	0.68 (0.40-1.17)
≥60	5540	7.3 (4.3-11.0)	0.63 (0.38-1.04)
Gender			
Male	78,913	8.9 (7.3-10.5)	1.00
Female	83,330	14.0 (11.0-16.0)	1.67 (1.53-1.82)
Socioeconomic status			
High	866	14.0 (9.0-19.0)	1.00
Medium	1732	14.0 (8.0-22.0)	1.02 (0.72-1.44)
Low	2663	13.0 (7.0–22.0)	0.99 (0.71–1.36)

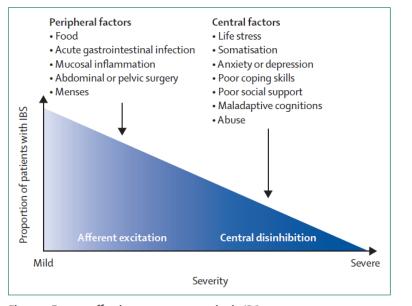


Figure 2: Factors affecting symptom severity in IBS Adapted from Sperber and colleagues. 16 IBS=irritable bowel syndrome.





GEORGE CRUIKSHANK. The Cholic. 1819. Hand-colored etching. 10½ × 8½ in. (25.7 × 20.6 cm). SmithKline Beckman Corporation Collection, Philadelphia Museum of Art. Influenced by the political and social satires of James Gillray, Cruikshank found favorite themes in the fashionable overindulgence in food and drink.

Facteur de risque: infection



• Observé chez +/- 10%

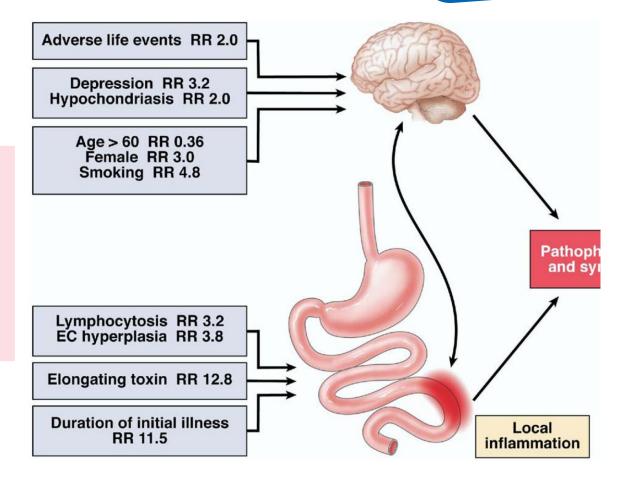
Key summary

Established knowledge on this subject

- Bacterial gastroenteritis quadruples the risk of developing irritable bowel syndrome (IBS) but the proportion of all IBS that is post-infectious (PI) is unclear.
- Risk factors include severity of initial illness, female gender and adverse psychological factors.
- What determines prognosis is uncertain.

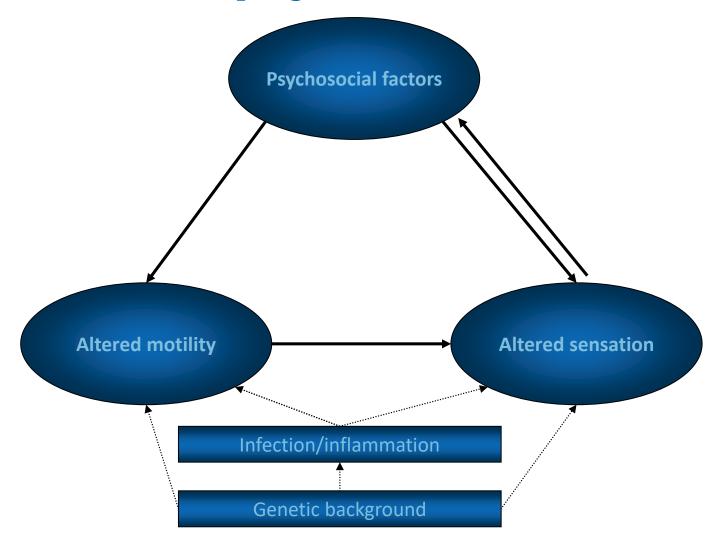
What are the significant and/or new findings of this study?

- Thirteen per cent of 7811 IBS patients met criteria for PI-IBS.
- PI-IBS was associated with childhood hygiene, somatisation and living in Northern Europe/America.
- Prognosis in PI-IBS was not different from non-PI-IBS.
- High somatisation, female gender and living in North America and Northern Europe were associated with lower recovery rates.



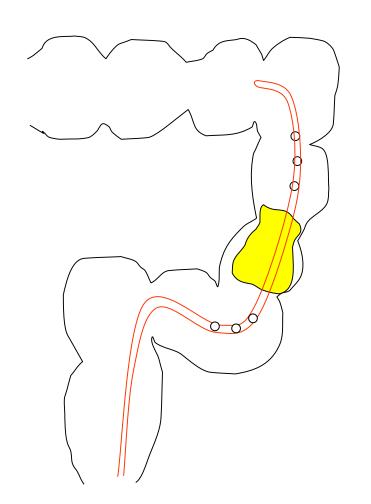


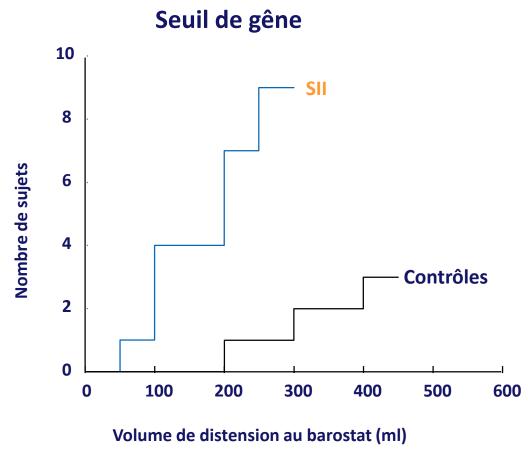
Modèle bio-psycho-social





Hypersensibilité viscérale







Inhibition descendante

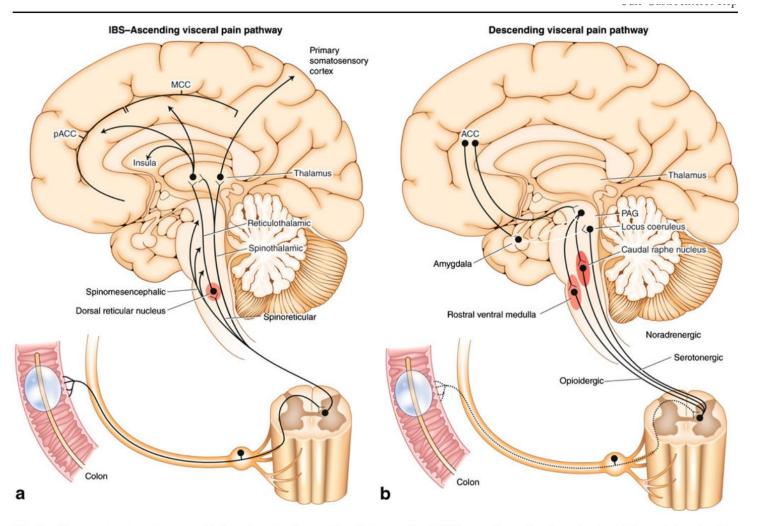
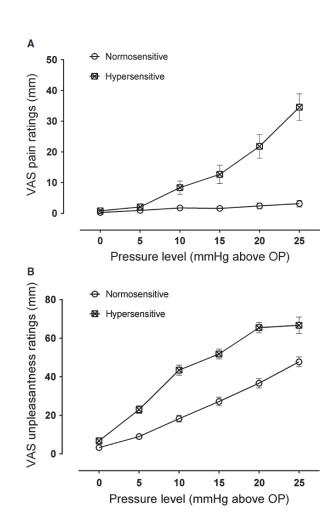
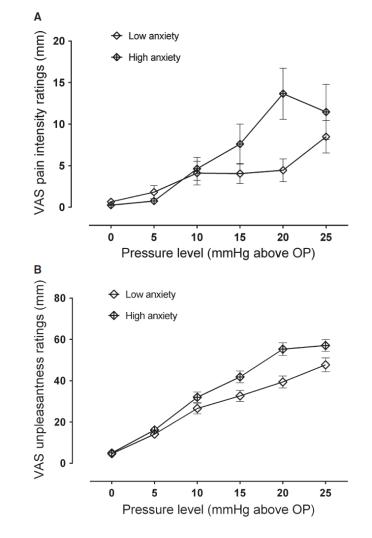


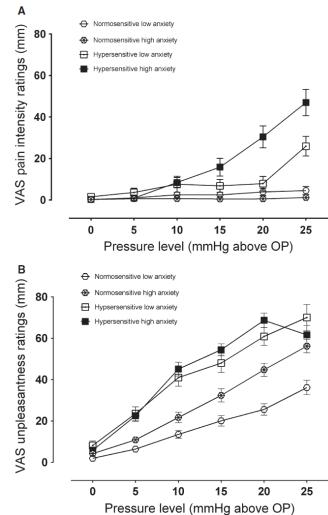
Fig. 1 a Neuroanatomic pathways mediating visceral pain sensation. b Descending inhibitory pathway for visceral pain. ACC—anterior cingulate cortex; IBS—irritable bowel syndrome; MCC—midcingulate cortex; pACC—perigenual anterior cingulate cortex; PAG—periaqueductal gray



Relation anxiété - hypersensibilité

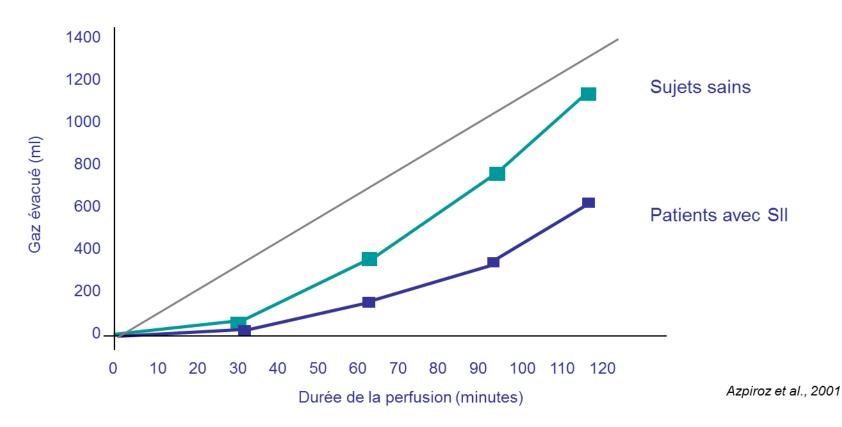






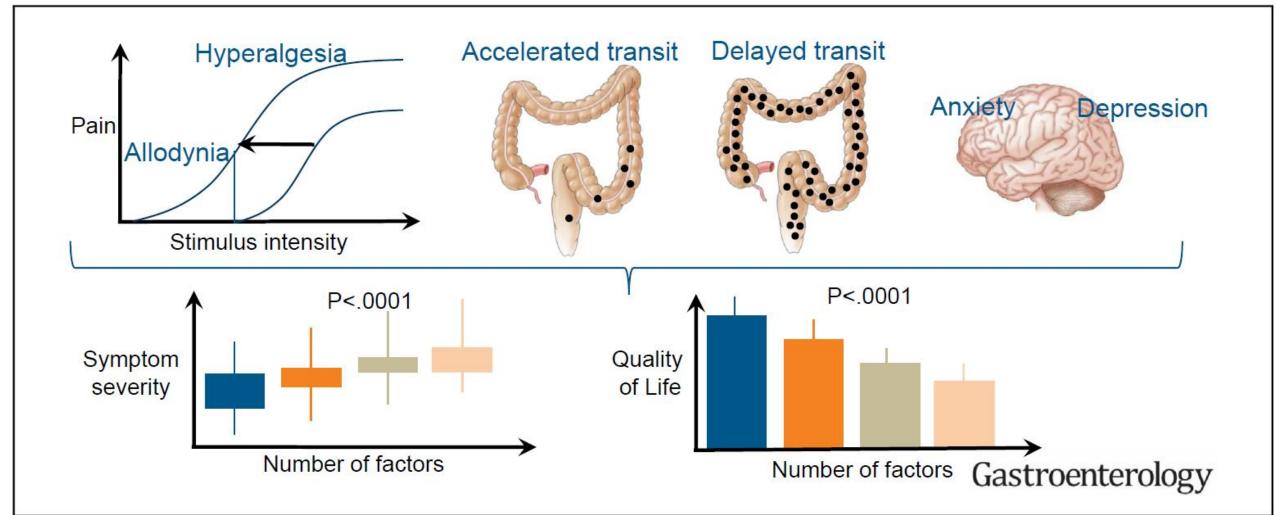


Transport du gaz





Physiopathologie





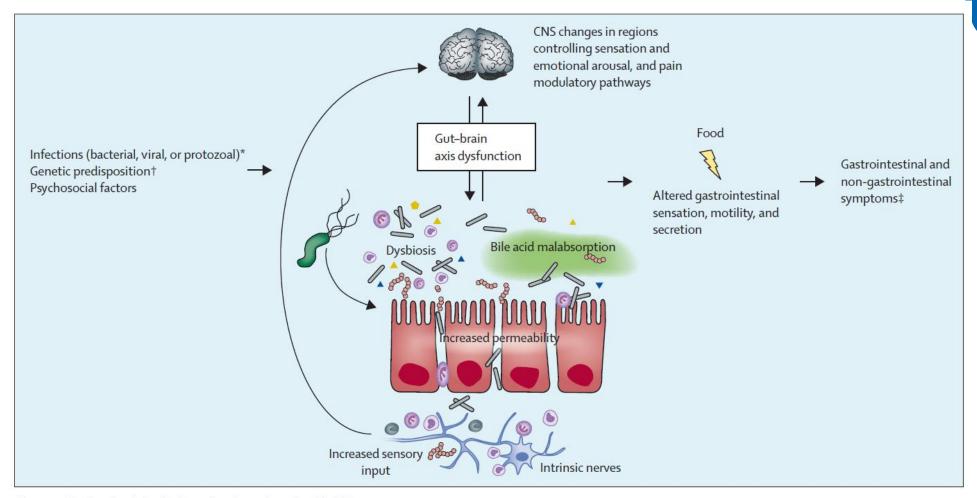


Figure 3: Pathophysiological mechanisms involved in IBS

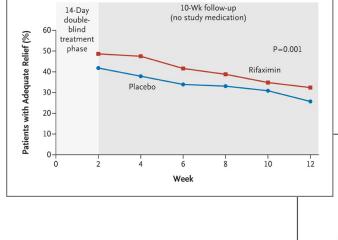
IBS=irritable bowel syndrome. *See references 17 to 20. †Genome-wide association studies have shown associations with variants of chromosome 9 and mutations in the sucrase-isomaltase gene. Other studies have shown that approximately 2% of patients with IBS carry mutations in SCN5A, which alters the function of the voltage-gated mechanosensitive sodium ion channel NaV1.5. ‡Gastrointestinal symptoms include abdominal pain; abnormal stool form, stool frequency, or both; and bloating. Non-gastrointestinal symptoms include back pain, gynaecological and bladder symptoms, headache, and fatigue.

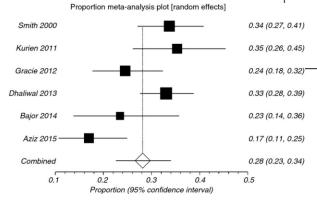


Le micro-environnement intestinal

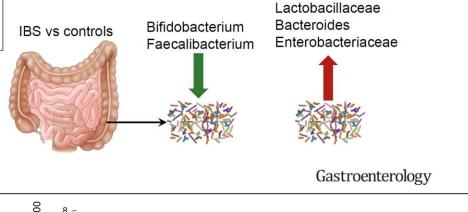
- FODMAP et disaccharides
- Le microbiote

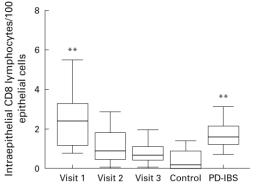
Acides biliaires dans IBS-D





• Fonction barrière et immunité







Facteurs génétiques

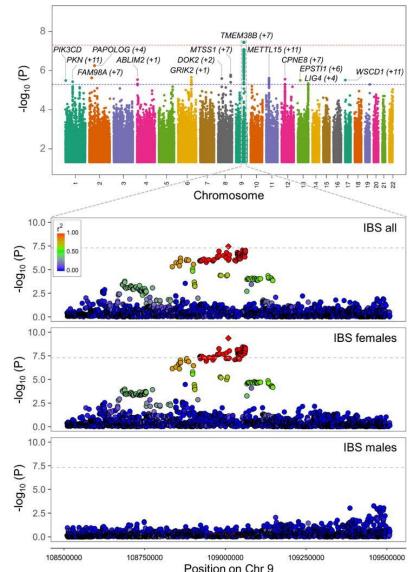


Table 1. Patient Cohort Characteristics

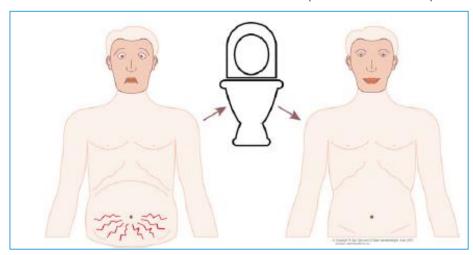
	IBS cases (n = 584)	IBS cases with SCN5A mutation (n = 13)
Median age, y (range)	49.5 (18.0–70.0)	49.8 (30.0–62.0)
Female, n (%)	484 (83)	11 (85)
Race		
Caucasian, n (%)	549 (94)	12 (92)
Non-Caucasian, n (%)	35 (6)	
Not stated, n (%)		1 (8)
Region		
Local, n (%)	396 (68)	10 (77)
National, n (%)	187 (32)	3 (23)
Met Rome II criteria, n (%)	328 (59)	
IBS subtype		
IBS-C, n (%)	59 (10)	4 (31)
IBS-D, n (%)	143 (25)	3 (23)
IBS-M, n (%)	181 (31)	3 (23)
Other, n (%)	201 (34)	3 (23)

IBS-M, mixed-subtype IBS.



Présentation clinique

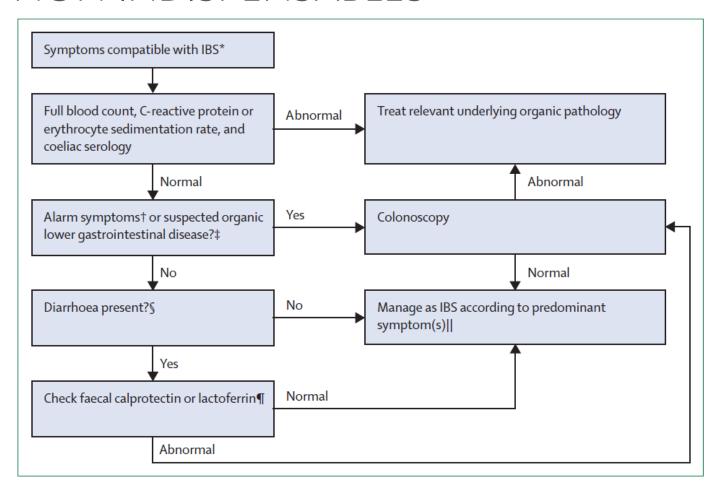
- La douleur est clé
 - o Pas de IBS en cas de douleur aiguë
 - o Récidivante et fluctuante plutôt que continue
 - o Le plus souvent dans l'abdomen inférieur
 - o Modifiée par le transit
- Le ballonnement est fréquent mais pas indispensable pour le diagnostic





Investigations

NON INDISPENSABLES





Approche

Table 3 Treatment approach for functional abdominal pain syndrome

Establishing an effective patient-physician relationship

- 1. Empathize
- 2. Educate
- 3. Validate
- 4. Reassure
- 5. Negotiate the treatment
- 6. Set reasonable limits

The treatment plan

- 1. Set reasonable treatment goals
- 2. Help the patient take responsibility
- 3. Base treatment on symptom severity and degree of disability
- 4. Medications
- 5. Mental health referral
- 6. Specific psychological treatments
- 7. Multidisciplinary pain treatment center referral



Consensus belge dans la prise en charge de l'intestin irritable:

Stratégies thérapeutiques

Prof. Hubert Piessevaux, MD PhD



Explanation is a crucial part of the management of IBS.

Lifestyle modifications are effective in the first-line approach of IBS.

- De nombreuses études montrent le déficit en information des patients
- L'éducation et l'information forment une base pour l'engagement du patient dans sa prise en charge
- Une étude randomisée montre un bénéfice d'une intervention psycho-éducative

A warm patient practitioner interaction with more time spent on explanations and questions, allowing patient understanding his or her condition, produces better outcome in comparison with a limited interaction, as demonstrated in a randomized controlled trial

- Explique en partie l'effet placébo
- 'Lifestyle modification' est mal défini
- Bénéfice persistant démontré pour l'effort physique (stimulé par kiné) (mais étude unique et faible nombre de patients)
- Yoga: pas d'évidence





Première ligne

Fibres (hydro-)solubles

- Toutes les fibres ne sont pas égales
- NNT= 7 pour Ispaghula/psyllium
- Faible risque
- Si pas de bénéfice, passer rapidement à la ligne suivante

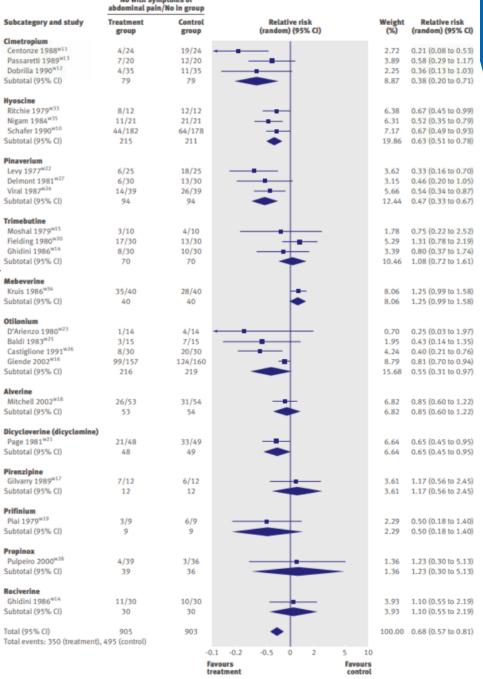


Study or subgroup			cebo or no tre		Majakt	Risk Ratio	Veer	Risk ratio
	Events	Total	Events	Total	Weight	M-H, random, 95% CI	Year	M-H, random, 95% CI
Bran								
Soltoft, 1976	17	32	12	27	2.4%	1.20 (0.70, 2.04)	1976	
Manning, 1977	7	14	7	12	1.3%	0.86 (0.42, 1.74)	1977	
Kruis, 1986	29	40	28	40	8.6%	1.04 (0.78, 1.37)	1986	+
Lucey, 1987	3	14	4	14	0.4%	0.75 (0.20, 2.75)	1987	-
Rees, 2005	6	14	7	14	1.0%	0.86 (0.39, 1.91)	2005	
Bijkerk, 2009	66	97	75	93	23.5%	0.84 (0.71, 1.00)	2009	**
Subtotal (95% CI)		211		200	37.2%	0.90 (0.79, 1.03)		•
Total events	128		133					
Heterogeneity: $\tau^2 = 0.00$;	$\chi^2 = 2.76$, d	i.f. = $5(P =$	0.74); $I^2 = 0\%$					
Test for overall effect: Z	= 1.47 (P=0	0.14)						
Ispaghula								
Ritchie, 1979	7	12	12	12	2.9%	0.60 (0.37, 0.97)	1979	
Longstreth, 1981	17	37	16	40	2.5%	1.15 (0.69, 1.92)	1981	-
Arthurs, 1983	11	40	14	38	1.6%	0.75 (0.39, 1.43)	1983	
Nigam, 1984	13	21	21	21	5.9%	0.63 (0.45, 0.88)	1984	
Prior, 1987	33	40	37	40	23.8%	0.89 (0.75, 1.05)	1987	-
Jalihal, 1990	2	11	3	9	0.3%	0.55 (0.11, 2.59)	1990 -	
Bijkerk, 2009	60	85	75	93	23.3%	0.88 (0.74, 1.04)	2009	-
Subtotal (95% CI)		246		253	60.2%	0.83 (0.73, 0.94)		*
Total events	143		178					
Heterogeneity: $\tau^2 = 0.01$; Test for overall effect: Z :			0.29); $I^2 = 189$	%				
TOOL OF OVERALL BUILDING. Z.	= 2.80 (P = 0)	0.005)						
Linseeds	= 2.80 (P=0	0.005)						
Linseeds Cockerell, 2012	= 2.80 (P = 0	27	8	13	1.4%	0.54 (0.27, 1.07)	2012	
Linseeds Cockerell, 2012 Subtotal (95% CI)	9			13 13	1.4% 1.4%	0.54 (0.27, 1.07) 0.54 (0.27, 1.07)	2012	•
Linseeds		27	8				2012	-
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic	9 9 cable	27 27					2012	
Linseeds Cockerell, 2012 Subtotal (95% CI)	9 9 cable	27 27					2012	
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z Fibre (unspecified)	9 9 cable	27 27					2012	
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Fibre (unspecified) Fowlie, 1992	9 9 cable = 1.75 (<i>P</i> = 0	27 27 20.08)	8	13	1.4%	0.54 (0.27, 1.07)		
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Fibre (unspecified) Fowlie, 1992 Subtotal (95% CI) Total events	9 9 cable = 1.75 (<i>P</i> = 0	27 27 20.08)	8	13	1.4%	0.54 (0.27, 1.07)		
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic	9 cable = 1.75 (P = 0	27 27 2.008)	8	13	1.4%	0.54 (0.27, 1.07)		
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z Fibre (unspecified) Fowlie, 1992 Subtotal (95% CI) Total events Heterogeneity: not applic	9 cable = 1.75 (P = 0	27 27 2.008)	8	13	1.4%	0.54 (0.27, 1.07)		
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Fibre (unspecified) Fowlie, 1992 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z:	9 cable = 1.75 (P = 0	27 27 27 20.08) 25 25	8	13 24 24	1.4% 1.1% 1.1%	0.54 (0.27, 1.07) 1.37 (0.62, 3.01) 1.37 (0.62, 3.01)		
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Fibre (unspecified) Fowlie, 1992 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Total (95% CI) Total events	9 cable = 1.75 (<i>P</i> = 0) 10 cable = 0.79 (<i>P</i> = 0)	27 27 20.08) 25 25 0.43) 509	8 7 7	24 24 24	1.4% 1.1% 1.1%	0.54 (0.27, 1.07) 1.37 (0.62, 3.01) 1.37 (0.62, 3.01)	1992	
Linseeds Cockerell, 2012 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Fibre (unspecified) Fowlie, 1992 Subtotal (95% CI) Total events Heterogeneity: not applic Test for overall effect: Z: Total (95% CI)	9 cable = 1.75 ($P = 0$ 10 cable = 0.79 ($P = 0$ 290 r ; $\chi^2 = 13.85$,	27 27 27 0.08) 25 25 0.43) 509 d.f. = 14 (<i>f</i>	8 7 7	24 24 24	1.4% 1.1% 1.1%	0.54 (0.27, 1.07) 1.37 (0.62, 3.01) 1.37 (0.62, 3.01)	1992	0.2 0.5 1 2 5

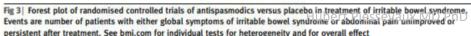
Première ligne

Spasmolytiques

1.5.	Spasmolytics are effective in IBS.	95%, Yes
1.6.	Spasmolytics are the preferred first-line treatment in IBS.	80%, Yes







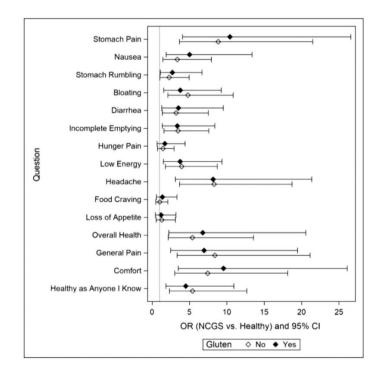


Interventions diététiques

1.5. Irrespective of specific food intolerar eating can exacerbate symptoms some IBS patients.		В	A+ 80%, A 20%, A- 0%, D- 0%, D 0%, D+ 0%	20-23
1.5. A fructose reduced diet is effective in the treatment of IBS.	65%, No	С	A+ 20%, A 45%, A- 15%, D- 10%, D 10%, D+ 0%	96-97
1.6. We advise against the gluten-free diet for the management of IBS.	85%, Yes	С	A+ 60%, A 25%, A- 10%, D- 0%, D 5%, D+ 0%	100-110
1.7. A low FODMAP diet is effective in the treatment of IBS.	100%, Yes	В	A+ 70%, A 30%, A- 0%, D- 0%, D 0%, D+ 0%	111-115
1.8. A low FODMAP diet is the pre- ferred first-line treatment in IBS.	50%, No	D	A+ 15%, A 35%, A- 15%, D- 20%, D 5%, D+ 10%	111-117

Study or subgroup	Low FODM Events To	AP Con otal Events	trol Total	Weight	Risk ratio M-H, random, 95%	Risk ratio CI M-H, random, 95% CI
1.1.1 Low FODMAP ver	sus alternativ	re diet				
Bohn 2015		38 20	37	20.4%	0.93 (0.60, 1.43)	+
Eswaran 2016	27	50 26	42	26.7%	0.87 (0.62, 1.24)	+
Staudacher 2017	22	51 33	53	24.3%	0.69 (0.47, 1.01)	
Subtotal (95% CI)	1	39	132	71.4%	0.82 (0.66, 1.02)	•
Total events	68	79				1
Heterogeneity: Tau ² = 0	0.00: Chi ² = 1	18. $df = 2 (P)$	= 0.55):	$I^2 = 0\%$		
Test for overall effect: Z			,			
1.1.2 Low FODMAP ver	sus high FO	OMAP				
McIntosh 2016	7	20 16	20	11.7%	0.44 (0.23, 0.83)	
Subtotal (95% CI)		20	20	11.7%	0.44 (0.23, 0.83)	•
Total events	7	16				-
Heterogeneity: Not appl	icable					
Test for overall effect: Z		0.01)				
	,	,				
1.1.3 Low FODMAP ver	sus usual die	t				
Halmos 2014	3	13 6	17	3.9%	0.65 (0.20, 2.13)	
Staudacher 2012	6	19 17	22	10.0%	0.41 (0.20, 0.82)	
Subtotal (95% CI)		32	39	13.9%	0.46 (0.25, 0.84)	•
Total events	9	23				
Heterogeneity: Tau ² = 0	0.00 ; $Chi^2 = 0$	45. $df = 1 (P)$	= 0.50):	$I^2 = 0\%$		
Test for overall effect: Z	r = 2.52 (P = 0)	0.01)	,			
I.1.4 FODMAP exclusion	n then FODA	MAP versus n	laceho			
Hustoft 2017	2	8 4	7	3.0%	0.44 (0.11, 1.71)	
Subtotal (95% CI)	-	8	7	3.0%	0.44 (0.11, 1.71)	
Total events	2	4		0.070	0.44 (0.11, 1.11)	
rotal events Heterogeneity: Not appl		4				
Test for overall effect: Z		23)				
rest for overall effect. 2	- 1.15 (7 = 0	7.23)				
Total (95% CI)	1	99	198	100.0%	0.69 (0.54, 0.88)	◆
Total events	86	122				[
Heterogeneity: $Tau^2 = 0$	0.03; Chi ² = 8.	.02, $df = 6 (P$	= 0.24)	$I^2 = 25\%$		
Test for overall effect: Z	r = 2.98 (P = 0)	0.003)				0.005 0.1 1 10 200
		6.26, df = 3 (Favors (experimental) Favors (control)

^{, 3} Low FODMAP diet and irritable bowel syndrome (IBS) symptoms. CI confidence interval, FODMAP fermentable oligo-, di- and monosaccharides



Evidence of high sugar intake, and low fibre and mineral intake, in the gluten-free diet

D. Wild*, G. G. Robins*, V. J. Burley[†] & P. D. Howdle*



Modifications du microbiome

1.4.	Prebiotics are not effective in IBS.	75%, No	D	A+ 30%, A 45%, A- 5%, D- 15%, D 5%, D+ 0%	213-215
1.5.	Selected probiotics are effective in IBS	80%, Yes	С	A+ 35%, A 45%, A- 15%, D- 0%, D 5%, D+ 0%	42,213,216-218
1.6.	Poorly resorbable antibiotics are effective in IBS-D.	75%, No	В	A+ 35%, A 40%, A- 25%, D- 0%, D 0%, D+ 0%	50,211,219-222
1.7.	Faecal microbiota transplantation may have a temporary effect in IBS.	70%, No	В	A+ 30%, A 40%, A- 30%, D- 0%, D 0%, D+ 0%	223-229
1.8.	Faecal microbiota transplantation is not effective in the treatment of IBS.	15%, No	В	A+ 10%, A 5%, A- 10%, D- 30%, D 30%, D+ 15%	223-229
1.9.	We advise against faecal microbiota transplantation for the treatment of IBS.	90%, Yes	В	A+ 70%, A 20%, A- 0%, D- 0%, D 10%, D+ 0%	223-229



Pré-/Pro-/Antibiotiques

- Data for prebiotics and synbiotics were sparse
- Which particular combination, species or strains of probiotics are effective for IBS remains, for the most part, unclear
- Both single-strain and multi-strain trials have demonstrated benefits
- Only a few probiotics available in Belgium have demonstrated efficacy (e.g. Bifidobacterium animalis subsplactis (Activia), L plantarum 299v (Bion Transfit), Bifidobacterium bifidum HI-MIMBb75 (Kijimea Pro), Bifidobacterium infantis 35624 (Alflorex), Bacillus coagulans MTCC 5856 (SporixX Pro), Escherichia coli (Symbioflor 2)).

Rifaximin has modest efficacy in improving symptoms in non-constipated IBS.

Membre du réseau Lid van het netwerk



Transplantation fécale

Author/country	N	Inclusion /	Fecal	Placebo	Administra	Donor	Follow-up	Primary	Results
(reference)	(act/plac)	IBS types	transplant		tion		(months)	endpoint	
Halkjaer / Denmark	51	IBS-SS≥175	12 g feces	Saline /	Frozen	Mix of 4	3	Decline in	Placebo better than
(2)	(25/26)	D-C-M	12 days	glycerol	capsules			IBS-SS	active (p=0,012)
Arionades / US	48	IBS-SS≥175	0-38g feces	Saline /	Frozen	?	3	Decline in	No difference active
(3)	(crossove	D-C-M	3 days	glycerol	capsules			IBS-SS	vs. placebo
` , ,	r)		,						·
Johnsen / Norway	83	IBS-SS≥175	50-80g feces	Own	Coloscopy	Mix of 2	3	IBS-SS	Active 36/55=65% vs.
(1)	(55/28)	D-M	(fresh/frozen)	feces	caecum	IVIIX OI Z		decline	placebo 12/28=43%
(1)	(00/20)	D-IVI	(110311/1102011)	10000	daccam			≥75 points	(<p 0.05)<="" td=""></p>
Holster / Sweden	16	IBS-SS≥175	30 g frozen	Own	Coloscopy	1 (high	6	IBS-SS	Active=placebo
(4)	(8/8)	D-C-M	feces	feces	caecum	butyrat	· ·	decline	No influence on
(4)	(0/0)	D-0-W	10003	10003	Caccam	e		≥30%	visceral sensitivity
						product		20070	visceral sensitivity
						ion)			
Lahtinen / Finland	49	Not specified	30 g frozen	Own	Coloscopy	1	12	IBS-SS	Active=placebo
(5)	(23/26)	D - M	feces	feces	caecum	(health		decline	Decrease IBS-SS in
. ,	, ,					` y)		≥50 points	active group at 3m
						,,		·	(p=0,01)
El-Salhy / Norway	164	IBS-SS≥175	30g or 60 g	Own	Duodenal	1 1	3	IBS-SS	Active 30g 76,9% vs.
(6)	(109/55)	D-C-M	frozen feces	feces	endoscope	(health		decline	active 60 g 89,1%
						У		≥50 points	vs.placebo 23,6%
						profile)			(vs placebo <p< td=""></p<>
									0,0001)
Holvoet / Belgium	62	Refractory	Fresh feces	Own	Nasoduode	2	3/12	Self-	Active 24/43=56% vs.
(7)	(43/19)	IBS +	(quantity?)	feces	nal/nasojeju	(high		reported	placebo 5/19=26%
		bloating			nal probe	diversit		improvem	(p=0,03)
		D-M				y)		ent	

IBS-SS= IBS-symptom score. D-C-M= diarrhea - constipation - mixed.

Interventions non-médicamenteuses visant l'axe intestin-cerveau



10.	Statements on non-pharmacological treatment targeting the brain-gut axis	Overall agreement, Endorsement	Grade of evidence	Voting distribution	References
1.1.	Cognitive behavioural therapy is effective in IBS.	95%, Yes	В	A+ 60%, A 35%, A- 5%, D- 0%, D 0%, D+ 0%	242,244-246
1.2.	Medical hypnotherapy is effective in IBS.	70%, No	В	A+ 35%, A 35%, A- 25%, D- 5%, D 0%, D+ 0%	248-254
1.3.	Yoga is effective in IBS.	35%, No	С	A+ 10%, A 25%, A- 40%, D- 0%, D 15%, D+ 10%	255-258
1.4.	Mindfulness is effective in IBS.	50%, No	С	A+ 10%, A 40%, A- 30%, D- 5%, D 15%, D+ 0%	260-263
1.5.	Osteopathy is not effective in IBS.	85%, Yes	С	A+ 40%, A 45%, A- 5%, D- 10%, D 0%, D+ 0%	265-266

Limitations of psychological treatment are the need for longer treatment durations, patients' motivation and the availability of specialised mental health professionals

	Psychological therap		Control	T-1-1	147-1-64	Risk ratio	V	Risk ratio
Study or subgroup	Events	Total	Events	rotal	vveight	M-H, Random,95% CI	Year	M-H, Random,95% CI
1.1.1 Congnitive bh		40		40	0.00/	0.00 (0.00, 0.70)	1001	
Greene (1994)	2	10	9	10	0.6%	0.22 [0.06, 0.78]	1994	
Payne (1995)		12	9	10	0.8%	0.28 [0.10, 0.76]	1995	
Vollmer (1998)	11	24	9	10	2.2%	0.51 [0.31, 0.82]	1998	
Drossman (2003)	51	112	36	57	3.3%	0.72 [0.54, 0.96]	2003	
Tkachuk (2003)	0	14	6	14	0.1%	0.08 [0.00, 1.25]	2003 -	
Boyce (2003)	27	35	25	34	3.4%	1.05 [0.80, 1.38]		
Kennedy (2005)	24	72	36	77	2.6%	0.71 [0.48, 1.07]	2005	
Lackner (2008)	9	23	27	27	2.1%	0.40 [0.25, 0.66]		
Craske (2011)	18	47	9	22	1.6%	0.94 [0.50, 1.74]	2011	
Subtotal (95% CI)		349		261	16.7%	0.60 [0.44, 0.83]		•
Total events	145		166					
	2 = 0.14; Chi ² = 26.47		= 0.000	9); $I^2 =$	70%			
Test for overall effe	ict: $Z = 3.12 (P = 0.00)$	02)						
4 4 0 Delevetice to	lalas as thesas							
1.1.2 Relaxation tra			40	40	4.001	0.0010.10.0.001	1000	
Lynch (1989)	4	11	10	10	1.3%	0.39 [0.19, 0.82]	1989	
Blanchard (1993)	10	14	8	9	2.6%	0.80 [0.54, 1.20]	1993	
Keefer (2001)	3	7	7	8	1.0%	0.49 [0.20, 1.20]	2001	
Boyce (2003)	31	36	25	34	3.6%	1.17 [0.92, 1.49]		+-
Van der veek (2007		54	50	51	4.2%	0.87 [0.77, 0.98]	2007	
Shinozaki (2010)	2	11	7	10	0.5%	0.26 [0.07, 0.97]	2010	
Boltin (2015)	12	16	19	19	3.2%	0.75 [0.56, 1.01]		
	18	36	21	34	2.5%	0.81 [0.53, 1.23]	2017	
Thakur (2017) Subtotal (95% CI)		36 185	10000	175	18.9%	0.81 [0.53, 1.23]	2017	•
Subtotal (95% CI) Total events	128	185	147	175	18.9%		2017	•
Subtotal (95% CI) Total events Heterogeneity: Tau	128 ² = 0.04; Chi ² = 18.08	185 B, $df = 7 (P$	147	175	18.9%		2017	•
Subtotal (95% CI) Total events Heterogeneity: Tau	128	185 B, $df = 7 (P$	147	175	18.9%		2017	•
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe	128 2 = 0.04; Chi ² = 18.08 oct: Z = 2.14 (P = 0.03)	185 B, df = 7 (P B)	147	175	18.9%		2017	•
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe	128 ² = 0.04; Chi ² = 18.08	185 B, df = 7 (<i>P</i> B) Brapy	147 ?= 0.01);	175 $I^2 = 6$	18.9%	0.80 [0.65, 0.98]		•
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987)	128 2 = 0.04; Chi ² = 18.04 cct: Z = 2.14 (P = 0.05) ent psychological the	185 B, df = 7 (P 3) Prapy	147 '= 0.01);	175 $I^2 = 6$	18.9%	0.80 [0.65, 0.98]	1987	•
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b	128 2 = 0.04; Chi ² = 18.06 ct: Z = 2.14 (P = 0.00; ent psychological the	185 3, df = 7 (<i>P</i> 3) erapy 10 38	147 = 0.01); 8 29	175 $I^2 = 6$ 9 39	18.9% 1% 1.2% 3.0%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08]	1987 1992	
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)a	128 $t^2 = 0.04$; Chi ² = 18.04 ct: $t^2 = 0.03$; Chi ² = 18.04 ent psychological the 4 22 4	185 3, df = 7 (<i>P</i> 33) erapy 10 38 10	147 2 = 0.01); 8 29 8	175 $I^2 = 6$ 9 39 10	18.9% 1% 1.2% 3.0% 1.1%	0.45 [0.20, 0.99] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14]	1987 1992 1992	
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)a Heitkemper (2004)	128 $t^2 = 0.04$; $t^2 = 18.04$ act: $t^2 = 18.04$ ent psychological the 4 22 4 25	185 3, df = 7 (<i>P</i> 33) erapy 10 38 10 48	147 2 = 0.01); 8 29 8 35	175 $I^2 = 6$ 9 39 10 47	18.9% 1% 1.2% 3.0% 1.1% 3.1%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)b Heitkemper (2004) Jarrett (2009)	128 $t^2 = 0.04$; Chi ² = 18.04 ct: $t^2 = 0.03$; Chi ² = 18.04 ent psychological the 4 22 4	185 3, df = 7 (F 3) erapy 10 38 10 48 62	147 2 = 0.01); 8 29 8	175 $f^2 = 6$ 9 39 10 47 62	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)b Jarrett (2004) Jarrett (2009) Subtotal (95% CI)	$t^2 = 0.04$; Chi ² = 18.04; Chi ² = 18.04; Chi ² = 18.04; Chi ² = 18.04; Chi	185 3, df = 7 (<i>P</i> 33) erapy 10 38 10 48	147 2 = 0.01); 8 29 8 35 55	175 $I^2 = 6$ 9 39 10 47	18.9% 1% 1.2% 3.0% 1.1% 3.1%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)a Heitkemper (2004) Jarrett (2009) Subtotal (95% CI) Total events	128 2 = 0.04; Chi ² = 18.0t ct: Z = 2.14 (P = 0.0t 4 22 4 25 41	185 3, df = 7 (F 3) erapy 10 38 10 48 62 168	147 2 = 0.01); 8 29 8 35 55	175 $I^{2} = 6$ 9 39 10 47 62 167	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992) Blanchard (1992)a Heitkemper (2004) Jarrett (2009) Subtotal (95% CI) Total events Heterogeneity: Tau	128 2 = 0.04; Chi ² = 18.04; cit: Z = 2.14 (P = 0.0; ent psychological the 4 22 4 25 41 96 2 = 0.00; Chi ² = 2.53,	185 3, df = 7 (P 3) erapy 10 38 10 48 62 168	147 2 = 0.01); 8 29 8 35 55	175 $I^{2} = 6$ 9 39 10 47 62 167	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992) Blanchard (1992)a Heitkemper (2004) Jarrett (2009) Subtotal (95% CI) Total events Heterogeneity: Tau	128 2 = 0.04; Chi ² = 18.0t ct: Z = 2.14 (P = 0.0t 4 22 4 25 41	185 3, df = 7 (P 3) erapy 10 38 10 48 62 168	147 2 = 0.01); 8 29 8 35 55	175 $I^{2} = 6$ 9 39 10 47 62 167	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Nelf (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Heitkemper (2004) Jarrett (2009) Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe	128 $r^2 = 0.04$; Chi ² = 18.04 ct: $Z = 2.14$ ($P = 0.05$) ent psychological the 4 22 4 25 41 96 $r^2 = 0.00$; Chi ² = 2.53, ct: $Z = 4.43$ ($P < 0.06$	185 3, df = 7 (P 3) erapy 10 38 10 48 62 168	147 2 = 0.01); 8 29 8 35 55	175 $I^{2} = 6$ 9 39 10 47 62 167	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91]	1987 1992 1992 2004	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effet 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Jarrett (2009) Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effet 1.1.4 Hypnotherapy	128 $r^2 = 0.04$; $Chi^2 = 18.01$ ct: $Z = 2.14$ ($P = 0.05$) ent psychological the 4 22 4 25 41 96 $r^2 = 0.00$; $Chi^2 = 2.53$, ct: $Z = 4.43$ ($P < 0.06$	185 3, df = 7 (P 3) erapy 10 38 10 48 62 168 df = 4 (P:	147 2 = 0.01); 8 29 8 35 55 135 = 0.64);	175 $1^2 = 6$ 9 39 10 47 62 167 167 $1^2 = 0\%$	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83]	1987 1992 1992 2004 2009	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Blanchard (1950) Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.4 Hypnotherapy Galovski (1998)	128 $r^2 = 0.04$; Chi ² = 18.04 ct: $Z = 2.14$ ($P = 0.03$) ent psychological the 4 22 4 25 41 96 $r^2 = 0.00$; Chi ² = 2.53, ct: $Z = 4.43$ ($P < 0.06$)	185 3, df = 7 (P 3) 9rapy 10 38 10 48 62 168 df = 4 (P = 0001)	147 2 = 0.01); 8 29 8 35 55 135 = 0.64);	175 $I^{2} = 6$ 9 39 10 47 62 167 167 $6^{2} = 0\%$	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.18% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83]	1987 1992 1992 2004 2009	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Nelf (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Heilkemper (2004) Subtotal (95% CI) Total events Total events Heterogeneity: Tau' Test for overall effe 1.1.4 Hypnotherapy Galovski (1998) Simren (2004)	128 $r^2 = 0.04$; Chi ² = 18.04 ct: $Z = 2.14$ ($P = 0.05$) ent psychological the 4 22 4 25 41 96 $r^2 = 0.00$; Chi ² = 2.53, ct: $Z = 4.43$ ($P < 0.06$)	185 3, df = 7 (F 3) erapy 10 38 10 48 62 168 df = 4 (P = 20001)	147 2 = 0.01); 8 29 8 35 55 135 = 0.64);	175 $I^{2} = 6$ 9 39 10 47 62 167 167 6 14	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83]	1987 1992 1992 2004 2009	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)b Blanchard (195% CI) Total events Subtotal (95% CI) Total events Test for overall effe 1.1.4 Hypnotherapy Galovski (1998) Simren (2004) Lindfors (2012)b	$t^2 = 0.04$; $t^2 = 18.04$; $t^2 = 18.04$; $t^2 = 18.04$; $t^2 = 2.14$	185 3, df = 7 (P 3) erapy 10 38 10 48 62 168 0df = 4 (P = 0001)	147 2 = 0.01); 8 29 8 35 55 135 = 0.64); 6 9	175 1 ² = 6 9 39 10 47 62 167 162 167	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83] 0.54 [0.25, 1.16] 0.44 [0.18, 1.11] 0.87 [0.67, 1.15]	1987 1992 1992 2004 2009	•
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Nelf (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Blanchard (1992)a Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.4 Hypnotherapy Galovski (1998) Simren (2004) Lindfors (2012)b Lindfors (2012)b	128 2 = 0.04; Chi ² = 18.04 ct: Z = 2.14 (P = 0.03 ent psychological the 4 22 4 25 41 96 2 = 0.00; Chi ² = 2.53, ct: Z = 4.43 (P < 0.00	185 3, df = 7 (F 3) erapy 10 38 10 48 862 168 df = 4 (F : 0001)	147 8 29 8 35 55 135 = 0.64); 6 9	175 $f^{2} = 6$ 9 39 10 47 62 167 6 14 23 45	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2% 1.2% 3.4% 3.5%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83] 0.54 [0.25, 1.16] 0.44 [0.18, 1.11] 0.87 [0.67, 1.15] 0.70 [0.55, 0.90]	1987 1992 1992 2004 2009 1998 2004 2012 2012	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)a Blanchard (1992)a Blanchard (1992)a Jarrett (2009) Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.4 Hypnotherapy Galovski (1998) Simmen (2004) Lindfors (2012)a Lindfors (2012)b Lindfors (2012)b Lindfors (2012)a Moser (2013)	$t^2 = 0.04$; $t^2 = 18.04$; $t^2 = 18.04$; $t^2 = 18.04$; $t^2 = 2.14$	185 3, df = 7 (P3) prapy 10 38 10 48 62 168 df = 4 (P: 0001) 6 14 25 45 51	147 2 = 0.01); 8 29 8 35 55 135 = 0.64); 6 9	175 f ² = 6 9 39 10 47 62 167 6 14 23 45 49	18.9% 11% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2% 1.2% 0.9% 3.4% 3.5% 2.8%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83] 0.54 [0.25, 1.16] 0.44 [0.18, 1.11] 0.87 [0.67, 1.15] 0.70 [0.55, 0.90] 0.71 [0.49, 1.03]	1987 1992 1992 2004 2009	•
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Neff (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Blanchard (1992)a Blanchard (1992)a Blanchard (1992)a Blanchard (1992)a Blanchard (1992)a Leftikeruper (2009) Subtotal (95% CI) Total events Test for overall effe 1.1.4 Hypnotherapy Galovski (1998) Simren (2004) Lindfors (2012)b Lindfors (2012)a Moser (2013) Subtotal (95% CI) Subtotal (95% CI)	128 $r^2 = 0.04$; Chi $r^2 = 18.04$; Chi $r^2 = 18.04$; Chi $r^2 = 0.05$; Chi $r^2 = 18.04$; Chi $r^2 = 0.05$; Chiral Chiral Chiral Chiral Chiral	185 3, df = 7 (F 3) erapy 10 38 10 48 862 168 df = 4 (F : 0001)	147 '= 0.01); 8 29 8 35 55 135 = 0.64); 6 9 20 40 31	175 $f^{2} = 6$ 9 39 10 47 62 167 6 14 23 45	18.9% 1% 1.2% 3.0% 1.1% 3.1% 3.8% 12.2% 1.2% 3.4% 3.5%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83] 0.54 [0.25, 1.16] 0.44 [0.18, 1.11] 0.87 [0.67, 1.15] 0.70 [0.55, 0.90]	1987 1992 1992 2004 2009 1998 2004 2012 2012	
Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.3 Multi-compon Nelf (1987) Blanchard (1992)b Blanchard (1992)b Blanchard (1992)a Blanchard (1992)a Subtotal (95% CI) Total events Heterogeneity: Tau' Test for overall effe 1.1.4 Hypnotherapy Galovski (1998) Simren (2004) Lindfors (2012)a Moser (2012) Moser (2013) Subtotal (95% CI) Total events	128 2 = 0.04; Chi ² = 18.04 ct: Z = 2.14 (P = 0.03 ent psychological the 4 22 4 25 41 96 2 = 0.00; Chi ² = 2.53, ct: Z = 4.43 (P < 0.00	185 3, df = 7 (F 3) brapy 10 38 10 48 62 168 62 168 4 (F 20001)	147 2 = 0.01); 8		18.9% 1% 1.2% 3.0% 1.1% 3.8% 12.2% 1.2% 1.2% 3.5% 2.8% 11.8%	0.80 [0.65, 0.98] 0.45 [0.20, 0.99] 0.78 [0.56, 1.08] 0.50 [0.22, 1.14] 0.70 [0.51, 0.96] 0.75 [0.61, 0.91] 0.72 [0.62, 0.83] 0.54 [0.25, 1.16] 0.44 [0.18, 1.11] 0.87 [0.67, 1.15] 0.70 [0.55, 0.90] 0.71 [0.49, 1.03]	1987 1992 1992 2004 2009 1998 2004 2012 2012	



Neuromodulateurs

9.	Statements on neuromodulators and pain management	Overall agreement, Endorsement	Grade of evidence	Voting distribution	References
1.1.	Tricyclic antidepressants are effective in IBS.	100%, Yes	В	A+ 85%, A 15%, A- 0%, D- 0%, D 0%, D+ 0%	128,230-234
1.2.	Selective serotonin reuptake inhibitors are effective in IBS.	95%, Yes	В	A+ 70%, A 25%, A- 5%, D- 0%, D 0%, D+ 0%	230-231
1.3.	Selective serotonin and noradrenalin reuptake inhibitors are effective in IBS.	65%, No	В	A+ 30%, A 35%, A- 25%, D- 5%, D 5%, D+ 0%	235-237
1.4.	Delta-ligands (pregabalin and gabapentin) are effective in IBS.	65%, No	В	A+ 30%, A 35%, A- 20%, D- 10%, D 0%, D+ 5%	238
1.5.	Centrally-acting opioids are not effective in IBS.	100%, Yes	D	A+ 80%, A 20%, A- 0%, D- 0%, D 0%, D+ 0%	232,239-240



Neuromodulateurs

SNRI – duloxetine open label placebo run in

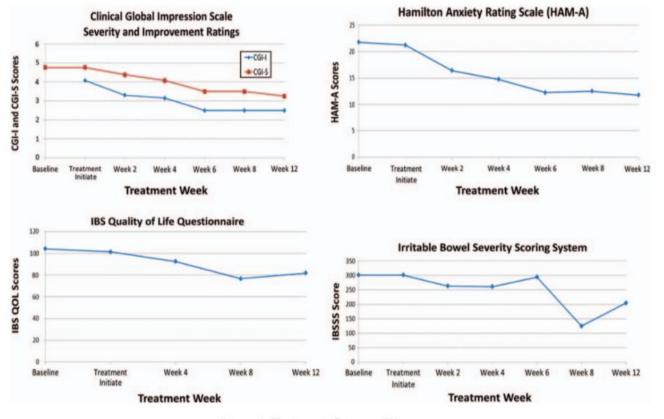


Figure 1. Treatment Outcome Measures.



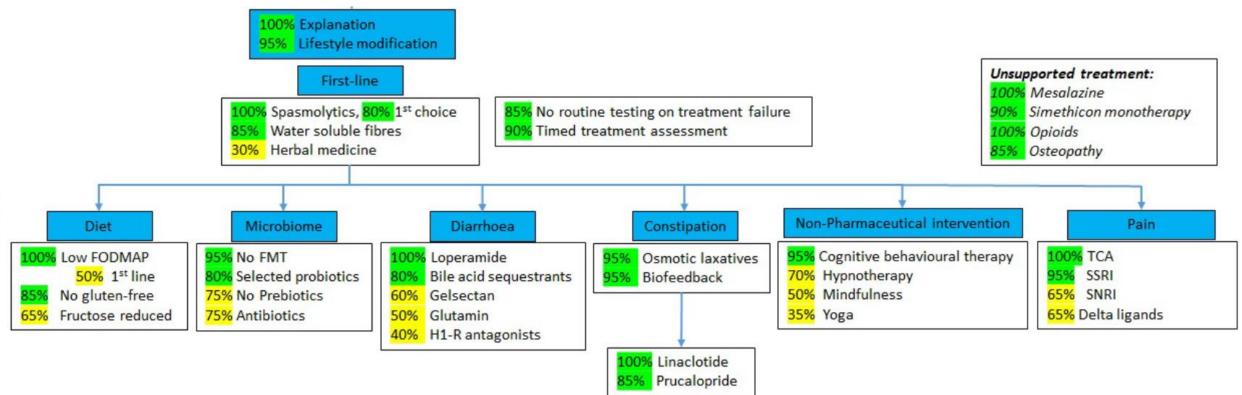
Question de la durée du traitement

Table 14. — Suggested treatment duration before assessing its efficacy. A non-exhaustive list of frequently used IBS therapies

Treatment	Assessment of treatment success	Reference
Otilonium bromide	10-15 weeks	52
Low FODMAP diet	1-2 weeks	112
Linaclotide	6 weeks	67
Amitriptyline	5-10 weeks	233
Citalopram	3-6 weeks	128

Algorithme de prise en charge







Conclusion: do's and dont's

- Faites un diagnostic positif et partagez-le avec vos patients
- Ayez conscience de la physiologie gastro-intestinale
- Expliquez la physiopathologie
- Prenez le temps d'une bonne anamnèse
- Recherchez les craintes et les agendas cachés
- Adaptez le traitement au profil des symptômes

