



ACHHEP
Asociación Chilena
de Hepatología

¿Qué indicaciones no farmacológicas debo recomendar?

Dra. Marta Mac-Vicar F.
Gastroenteróloga – Hepatóloga
Hospital Regional de Concepción
Prof. Asistente UdeC

¿Puedo beber
Alcohol?

¿Cómo puedo prevenir
el cáncer de hígado?

¿Qué puedo
comer?

¿Puedo fumar?

¿Cuánta agua puedo
tomar?

¿Puedo hacer
ejercicio?



Nutrición



Manejo multidisciplinario

Cirrosis:

Energía 35 kcal/ kg
Proteínas 1.2 a 1.5 g/kg.

Cirrosis IMC<18,5 / Child Pugh C, sarcopénicos, descompensados:

aa de cadena ramificada
(Leucina – isoleucina).

Oral – enteral -
parenteral

Obesos(IMC >30, corregido por la retención de líquidos):

Reducción en 500–
800 kcal/d
Proteínas > 1.5
g/kg/día IMC ideal.

Encefalopatía:

Idem al resto de los
cirróticos
Evitar la restricción de
proteínas
Fomentar el consumo
de verduras y
proteínas lácteas.
Aa de cadena
ramificada

Oral – enteral –
parenteral.

Desayuno – almuerzo –cena
Media mañana – media tarde –
noche

Ingesta de Sal

Restricción moderada en pacientes con ascitis grado 2-3:

- 80–120 mmol de sodio al día = 4.6–6.9 g de sal.
- No agregar sal a las comidas y no comer alimentos pre-cocidos.

- No hay ensayos clínicos controlados que comparen la restricción de ingesta de sodio versus no restricción
- Los resultados de ensayos clínicos donde se compararon distintos regímenes de ingesta reducida de sodio son controvertidos
- Una reducción más severa del contenido de sodio se considera innecesaria e incluso potencialmente perjudicial, ya que puede afectar al estado nutricional.

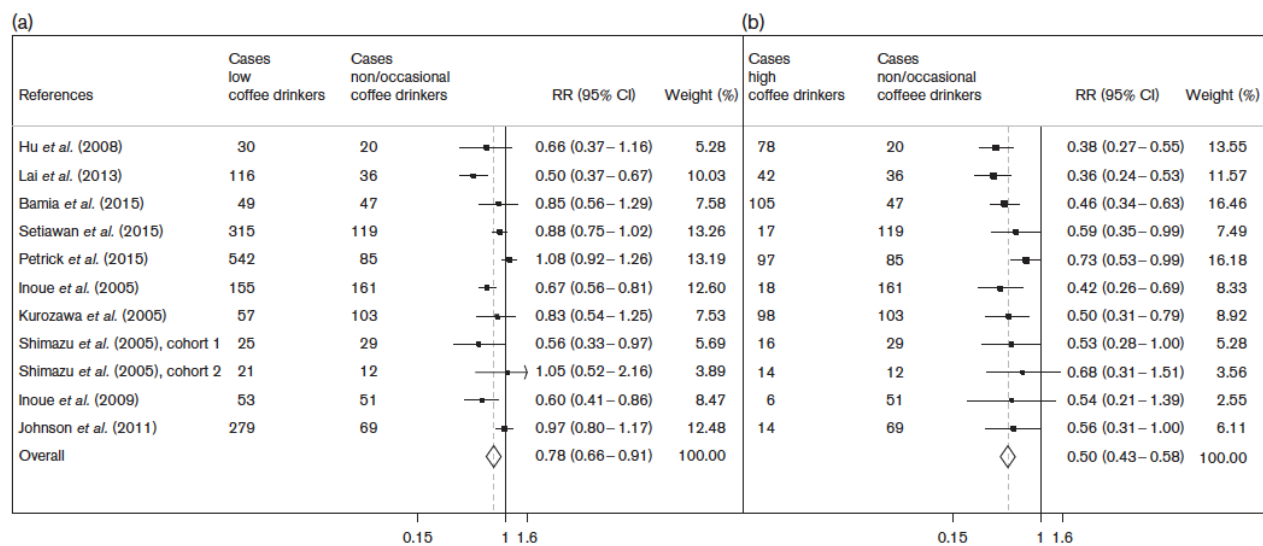
Ingesta de agua

- Restricción de líquidos a 1.000 ml / día en el manejo de la hiponatremia hipervolémica

Coffee and the risk of hepatocellular carcinoma and chronic liver disease: a systematic review and meta-analysis of prospective studies

Francesca Bravi^a, Alessandra Tavani^a, Cristina Bosetti^a, Paolo Boffetta^b and Carlo La Vecchia^c 2016

Fig. 3



Study-specific and summary RRs of HCC according to the amount of coffee. (a) Low coffee consumption versus no/occasional coffee consumption. (b) High coffee consumption versus no/occasional coffee consumption. CI, confidence interval; HCC, hepatocellular carcinoma; RR, relative risk.

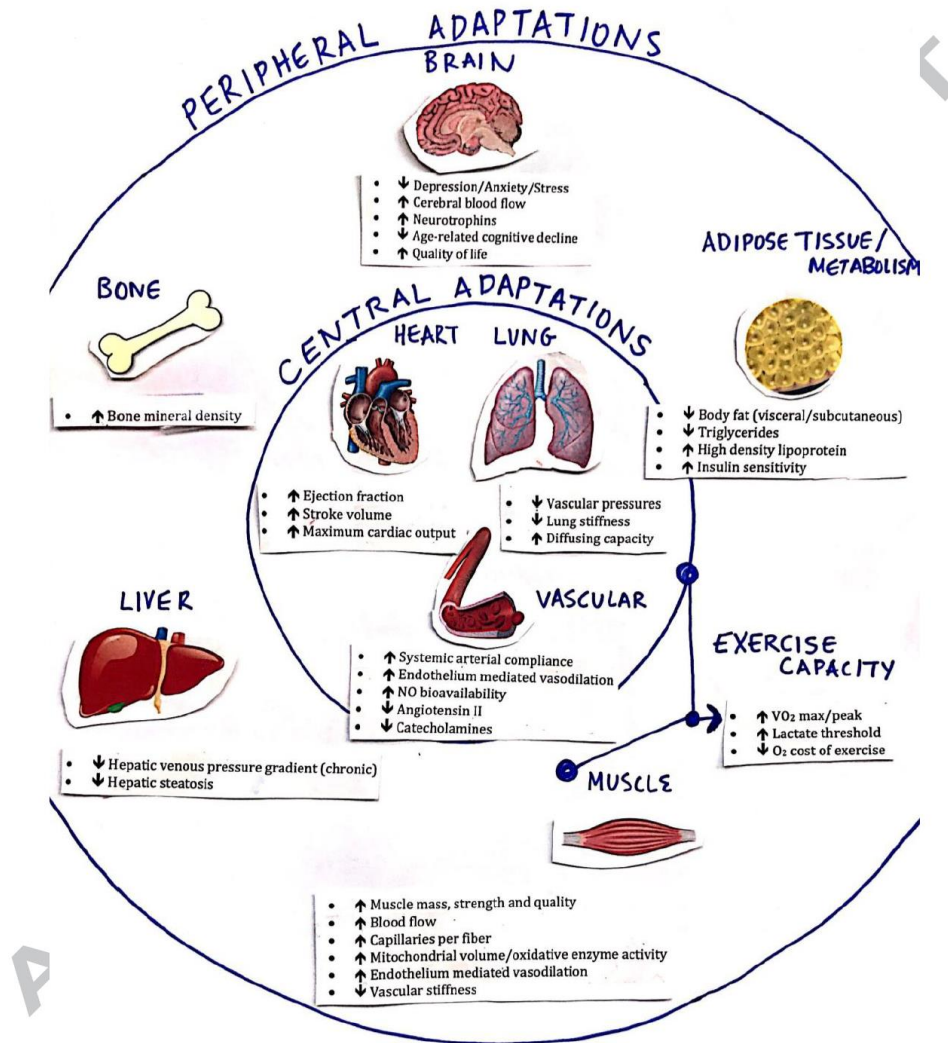
Café

Coffee consumption has been shown to decrease the risk of HCC in patients with chronic liver disease. In these patients, coffee consumption should be encouraged (**evidence moderate; recommendation strong**).



Ejercicio





Physical exercise for people with cirrhosis (Review)

Aamann L, Dam G, Rinnov AR, Vilstrup H, Gluud LL 2018

- 6 ensayos clínicos aleatorios (173 ptes.) Child Pugh A o B.
- 8-14 semanas
- Aeróbico: 3; resistencia: 1; aeróbico más resistencia:2
- Grupos de control: Ejercicios simulados (relajación) o sin intervención.

Exercise compared to no exercise for people with cirrhosis						
Patient or population: people with Child-Pugh stage A or B cirrhosis						
Setting: outpatients						
Intervention: 8-14 weeks of physical exercise (aerobic 3 RCTs; resistance 1 RCT; or a combination of aerobic and resistance training 2 RCTs)						
Comparison: sham exercise (supervised relaxation 1 RCT) or no exercise (5 RCTs)						
Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	No. of participants (studies)	Quality of the evidence (GRADE)	Comments
	Risk with no exercise	Risk with exercise				
All-cause mortality Follow-up: range 8-14 weeks	Study population		RR 0.19 (0.01 to 3.73)	173 (6 RCTs)	⊕⊕⊕○ Moderate ^d	
	24 per 1000	5 per 1000 (0 to 89)				
Serious adverse events Follow-up: range 8-14 weeks	Study population		RR 0.61 (0.19 to 1.94)	173 (6 RCTs)	⊕⊕○○ Low ^b	-
	155 per 1000	94 per 1000 (29 to 300)				
Health-related quality of life - CLDQ (total score 1-7, high score corresponds to a better HRQoL) Follow-up: range 8-14 weeks	The mean quality of life - CLDQ (total score) ranged from 5.03 to 5.39		MD 0.11 higher (0.44 lower to 0.67 higher)	81 (3 RCTs)	⊕⊕○○ Low ^b	-
Anthropometric measurements: mid-arm circumference (cm) Follow-up: range 12-13 weeks	The mean mid-arm circumference (cm) ranged from 27.1 to 31.5		MD 2.61 higher (0.36 higher to 4.85 higher)	72 (3 RCTs)	⊕⊕○○ Low ^b	-
Anthropometric measurements: mid-thigh circumference (cm) Follow-up: range 8-13 weeks	The mean mid-thigh circumference (cm) ranged from 51.8 to 54.6		MD 1.76 higher (0.26 lower to 3.77 higher)	128 (5 RCTs)	⊕⊕○○ Low ^b	-
Physical fitness: peak exercise oxygen uptake (mL/kg/minute) Follow-up: range 8-14 weeks	The mean peak exercise oxygen uptake (mL/kg/minute) ranged from 21.2 to 26.1		MD 0.3 higher (2.74 lower to 3.35 higher)	100 (4 RCTs)	⊕⊕○○ Low ^b	-
Physical fitness: 6-Minute Walk Test (min in total) Follow-up: range 8-13 weeks	The mean 6-Minute Walk Test (min in total) ranged from 309 to 546		MD 56.06 higher (9.14 lower to 121.26 higher)	105 (4 RCTs)	⊕○○○ Very low ^c	-

Heterogeneidad / Sesgos

No hubo impacto en mortalidad ni calidad de vida.

No aumento el riesgo de efectos adversos

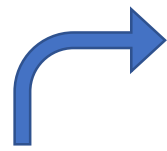
No hubo aumento en la capacidad funcional

Efecto (+) en circunferencia del brazo

Rcomendaciones...

Table 4. FITT (Frequency, Intensity, Type, Time) recommendations for exercise in cirrhosis (adapted from reference^{1,127})

Characteristic	Aerobic	Resistance	Flexibility & Balance
Frequency	Start with 4 days/week; aim to do every day	2 or more days/week on non-consecutive days if using external resistance	2 or more days/week
Intensity	Moderate intensity 5-6 on a 10point Borg Scale. The exerciser should pass the talk test = be able to speak comfortably during exercise to ensure they are not overexerting themselves.	Ensure good form for the exercises to work the correct muscles and have the desired effect Perform with a weight or exercise resistance band that a rest is needed after 10-15 repetitions (a "set"). When 3 sets of 10-15 repetitions can be completed easily, increase the stiffness of the resistance band or the weight to make the 10-15 repetitions difficult again.	Stretch until there is a feeling of tightness or slight discomfort
Time	The very deconditioned may need to start with walk 1minute, rest 1-minute then repeat for a total time of 5 minutes. Gradually increase walking time and decrease resting time. Build to 40 minutes in each session. Aim: 150 minutes each week	Videos are divided into 7 major muscle groups. Start with 3-4 exercises per session, doing 1 set of 10-15 repetitions. Aim: Increase to all 7 exercises per day, doing 3 sets of 10-15 repetitions.	1 set of 3 repetitions. Stretches can be held for 3060 seconds. Aim: 1 set of 3 repetitions (510 minutes)
Type	Walking (indoors or outdoors) to improve overall functionality. Other activities can be selected by the patient (e.g., cycling, elliptical)	Progressive weight training activities or functional strengthening exercises, such as stair climbing	Stretches and balance exercises targeting the large muscles of the upper and lower body



www.wellnesstoolbox.ca

wellness toolbox

The Wellness Toolbox

The Wellness Toolbox is a collection of resources for patients living with a chronic disease, friends & family, and their healthcare practitioners.

Cirrhosis

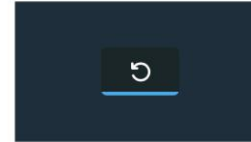
Explore wellness tools and resources, such as our "Nutrition in Cirrhosis Guide" and cirrhosis-specific exercises.

[VIEW THE RESOURCES](#)

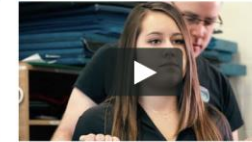
IBD

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Lateral Arm Raises with Banding
(upper body)



Arm Curls with Banding
(upper body)



Over-head Triceps Extension with Banding
(upper body)



Leg Extensions with a Pause
(lower body)



Hamstring Curl with a Towel
Can use a scarf, belt, or a plastic bags knotted together instead of a towel. (lower body)



Standing Calf Raises
(lower body)



Squat
Stand with your back almost

Precaución...

Topic	Exercise prescription modification
Part I Cirrhosis-related screening	
• MELD >20?	Case-by-case assessment to determine if CEP referral is needed for the patient to progress beyond Introductory exercises
• High-risk varices?	Ensure adequate primary or secondary variceal prophylaxis is in place prior to program.
• Hepatic encephalopathy (HE)?	Medical optimization of HE prior to exercising. Programming supervised by caregivers or if not possible, requires CEP supervision
• Ascites?	Optimize medical management Progress beyond Introductory exercise on days where ascites accumulation is insignificant and/or does not affect balance Caregiver supervision is ideal
• Platelets <20,000/uL or Hb < 8.0 g/dL	Exercise limited to Introductory level to avoid falls and/or injury
• Diabetes mellitus?	Blood glucose checks completed before and after exercising (hypoglycemia unawareness) ⁵⁵
• Diuretic therapy?	At-risk of volume depletion and hypotension with exercise. Prescribe a home blood pressure monitor for use after exercising ¹²⁵ .
Part II Cardiopulmonary safety concerns	
"Medical clearance" required if any of the following are present	
• Signs and Symptoms	Chest discomfort with exertion Unreasonable breathlessness Dizziness, fainting, blackouts Heart palpitations Lower limb claudication Known heart murmur
• Past or current medical conditions	Heart attack Heart surgery, cardiac catheterization, or coronary angioplasty Pacemaker/implantable cardiac defibrillator/rhythm disturbance Heart valve disease Heart failure Heart transplantation Congenital heart disease Diabetes Renal disease ***The method of "Medical Assessment" is left to the discretion of the physician ⁵⁴
Part III Overall physiological competence	
• Heart Rate >100 or <50	– Raises concerns about patient's physiological competence to complete unsupervised exercises – Patient requires "medical clearance" before
• Systolic blood pressure >160 mm Hg or <85	
• Diastolic blood pressure >110 mm Hg or <50 mm Hg	

Cambio en el estilo de Vida



Effects of an Intensive Lifestyle Intervention Program on Portal Hypertension in Patients With Cirrhosis and Obesity: The SportDiet Study

Annalisa Berzigotti,¹⁻³ Agustín Albillos,^{1,4} Candid Villanueva,^{1,5} Joan Genescá,^{1,6} Alba Ardevol,^{1,5} Salvador Agustín,^{1,6} Jose Luis Calleja,^{1,7} Rafael Bañares,^{1,8} Juan Carlos García-Pagán,^{1,2} Francisco Mesonero,^{1,4} and Jaime Bosch¹⁻³; on behalf of the Ciberehd SportDiet Collaborative Group

Estudio prospectivo, multicéntrico
Dieta hipocalórica-normoproteica + Ejercicio físico moderado
n= 50
Cirrosis compensada, sin ascitis ni otra complicación, Child-Pugh A o B \leq 8, HVPg \geq 6 mmHg, IMC $>$ 26.

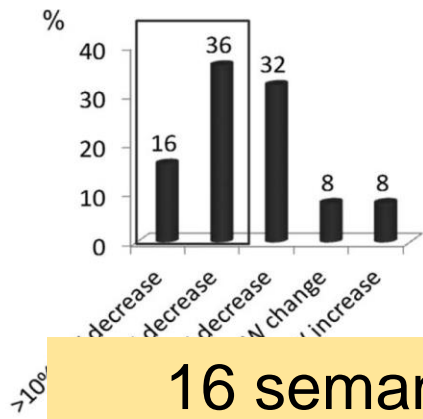
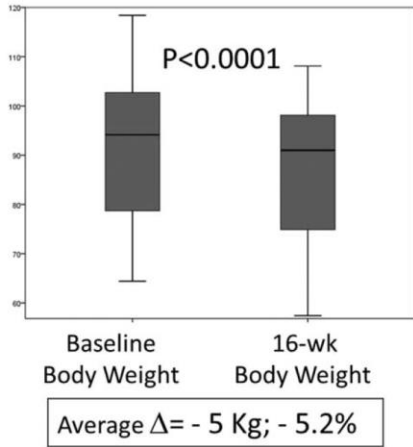


FIG. 1. Effects of the intensive LS intervention on BW in the study population. As shown, a significant decrease was achieved,

16 semanas de dieta y ejercicio moderado fueron seguros y redujeron el IMC y la HTP en pacientes obesos y sobrepeso. No hubo mejoría en el Child-Pugh ni MELD-Na.

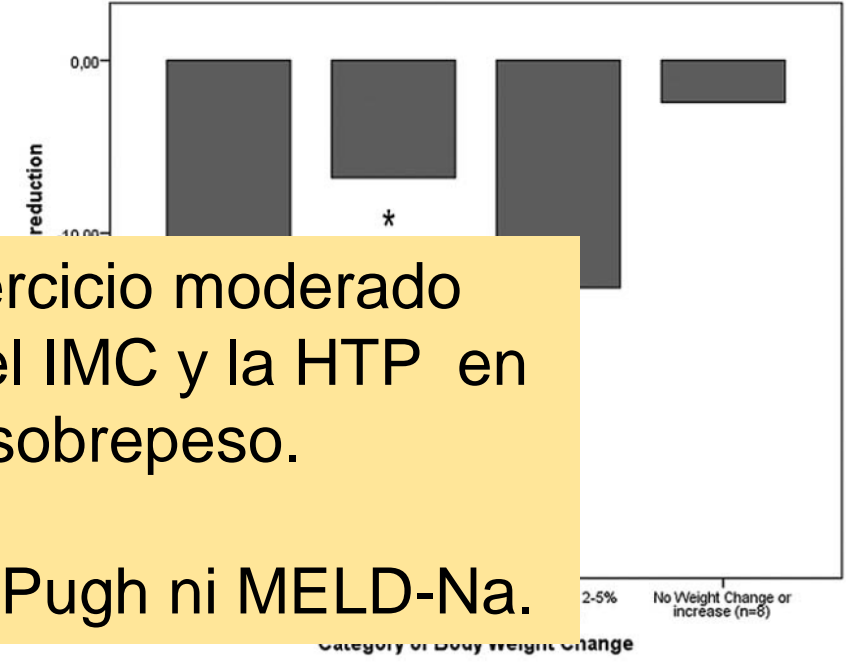


FIG. 3. Percentage of change in HVPG according to the percentage of change in BW. As shown, patients with weight loss over 10% showed a more-pronounced decreased in HVPG, whereas patients in whom BW did not change or increased did not show any change in HVPG. * $P < 0.05$ versus baseline values.

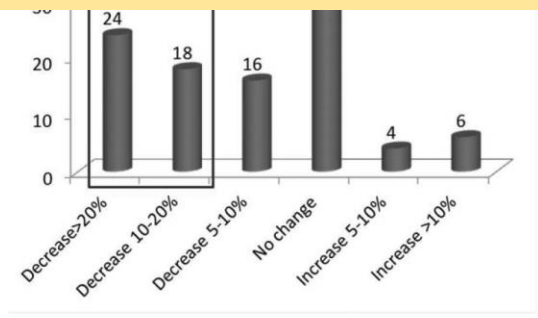
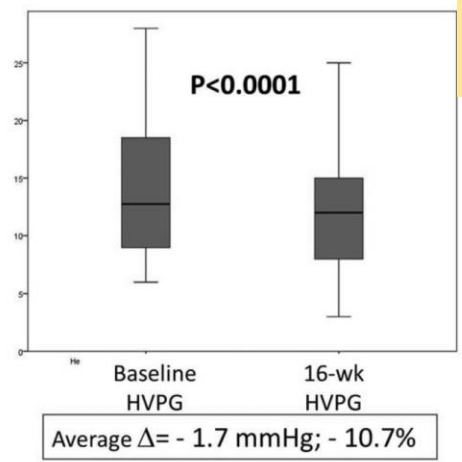


FIG. 2. Effects of the intensive LS intervention on HVPG in the study population. As shown, a significant decrease was achieved, and 42% of patients showed a HVPG decrease $\geq 10\%$ (*a priori* defined as “clinically relevant”). Abbreviation: wk, week.

Interventions to improve sarcopenia in cirrhosis: A systematic review

Mejoría en la masa muscular, la fuerza y la función física después del ejercicio aeróbico e intervención nutricional.



Journal of Hepatology 42 (2005) 218–224

Journal of
Hepatology

www.elsevier.com/locate/jhep

Alcohol, tobacco and obesity are synergistic risk factors for hepatocellular carcinoma

Jorge A. Marrero*, Robert J. Fontana, Sherry Fu, Hari S. Conjeevaram, Grace L. Su, Anna S. Lok

Division of Gastroenterology, University of Michigan, 3912 Taubman Center, Ann Arbor, MI 48109-0362, USA

Pctes con HCC / cirrosis sin HCC / Control sin enfermedad
hepática.

Consumo de

- Alcohol: 6 X (OR 5.7; IC 95%: 2.4–13.7)
- Tabaco: 5 X (OR 4.9; IC 95%: 2.2–10.6)
- Obesidad: 4X (OR 4.3; IC 95%: 2.1–8.4).

Para el OH y Tabaco el riesgo aumenta según la dosis. Índices sinérgicos al sumar dos o más factores.

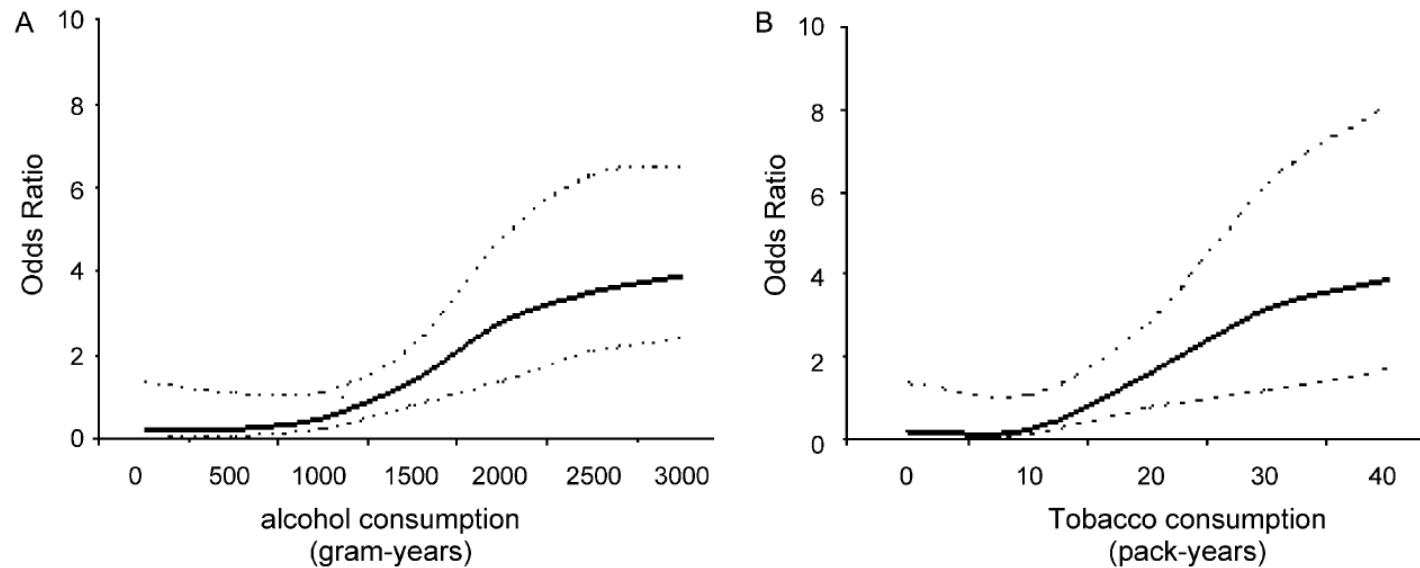


Fig. 1. Odds ratio and their 95% confidence intervals (dotted line) for the risk of HCC according to alcohol (A) and tobacco (B) exposure by fitting spline regression models.

RESEARCH ARTICLE

Open Access

Periodontitis in patients with cirrhosis: a cross-sectional study



Lea Ladegaard Grønkjær^{1*}, Palle Holmstrup², Søren Schou³, Johanne Kongstad², Peter Jepsen^{1,4} and Hendrik Vilstrup¹



Contents lists available at [ScienceDirect](#)

Medical Hypotheses

journal homepage: www.elsevier.com/locate/mehy



Is periodontitis a risk factor for infections in cirrhotic patients?



B. Di Profio, C.C. Villar, L. Saraiva, K.L. Ortega, C.M. Pannuti*

Department of Estomatology, School of Dentistry, University of São Paulo, Brazil

SAGE Open Med. 2015 Sep 9;3:2050312115601122. doi: 10.1177/2050312115601122. eCollection 2015.

Periodontal disease and liver cirrhosis: A systematic review.

Grønkjær LL¹.

80% de periodontitis en
pacientes cirróticos.

Mayor riesgo nutricional

Conclusiones

- Los pacientes cirróticos deben ser evaluados por un equipo multidisciplinario.
- Se debe evitar y tratar la malnutrición - sarcopenia.
 - Dietas deben incluir entre 1.2 – 1.5 g proteínas /Kg peso
 - Ejercicios
 - Restricción moderada de sal en caso de estar indicado
- Restricción de líquidos sólo en hiponatremia hipervolémica
- Se debe recomendar el uso de café
- Evaluación dental.
- No beber OH ni fumar tabaco.