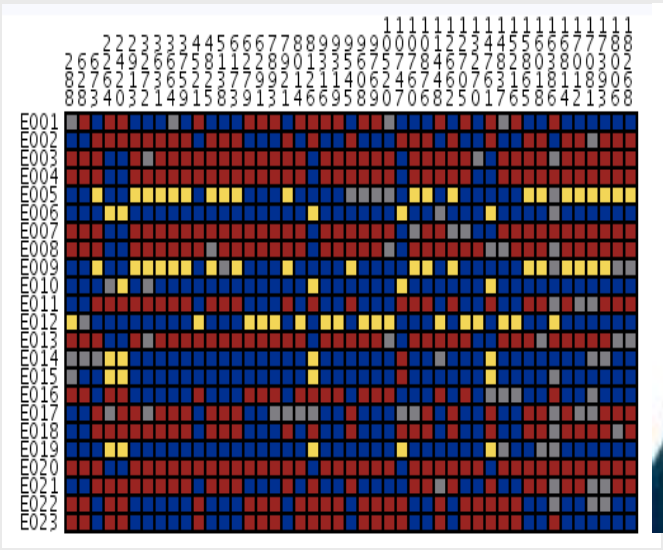
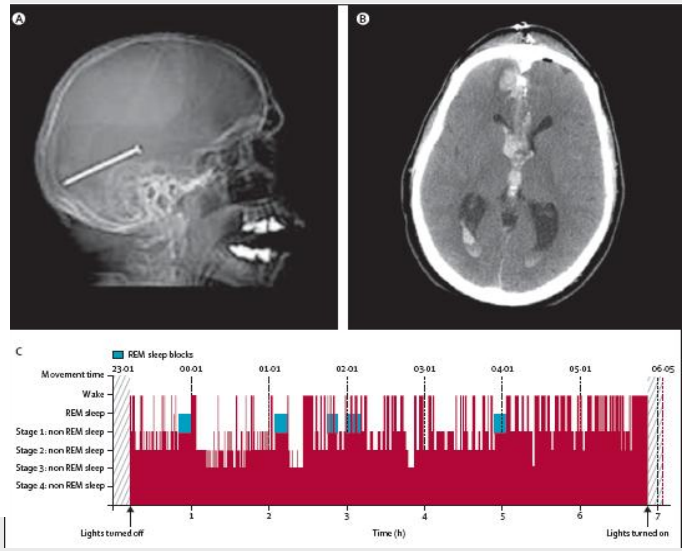
Actualités Sommeil
(en dehors du SAOS)
2009 - 2010





Pr Yves DAUVILLIERS

Centre de Référence Narcolepsie, Neurologie,

INSERM U888, Montpellier, France

Obligation de déclaration des liens d'intérêts prévu à l'article L4113-13 du Code de la Santé Publique.
Consultant pour UCB Pharma, Cephalon, Bioprojet, GlaxoSmithKline, and Boehringer Ingelheim.

Phénotype

RLS IN NARCOLEPSY WITH CATAPLEXY

Restless Legs Syndrome is Frequent in Narcolepsy with Cataplexy Patients

Giuseppe Plazzi, MD[1]; Raffaele Ferri, MD[2]; Elena Antelmi, MD[1]; Sophie Bayard, PsyD, PhD[3]; Christian Franceschini, PsyD, PhD[1]; Filomena I.I. Cosentino, MD[2]; Beatriz Abril, MD[3]; Karen Spruyt, PsyD, PhD[4]; Federica Provini, MD[1]; Pasquale Montagna, MD[1]; Yves Dauvilliers, MD[3]

Table 2—The prevalence of RLS in NC patients compared with control subjects. The odds ratio of the risk for RLS of NC patients relative to control subjects is also reported.

				RLS		
	Total no.	RLS− no.	RLS+ no.	Prevalence, %	+95% CI	−95% CI
NC patients	184	157	27	14.7	20.8	10.0
Control subjects	235	228	7	3.0	6.0	1.5
Chi-square	18.931, P = 0.00001					
Odds ratio	5.6; CI ± 95% 2.38–13.18					

Continuous variables	total n	RLS− mean	RLS− SD	RLS+ mean	RLS+ SD	Logistic regression adjusted R^2	Logistic regression P ≤
Age, years	180	41.2	17.6	48.6	19.0	0.016	0.05
Weight, kg	174	80.9	15.8	85.8	20.8	0.005	NS
Height, m	173	1.7	0.1	1.7	0.1	0.007	NS
Body mass index	173	27.5	4.9	27.9	5.4	−0.005	NS
Epworth Sleepiness Scale	172	15.2	5.1	16.7	4.5	0.007	NS
EDS age at onset, y	175	22.3	11.3	25.9	12.4	0.007	NS
Cataplexy age at onset, y	171	25.3	12.0	30.2	13.3	0.071	NS
CSF hypocretin, pg/mL	38	45.0	89.0	53.0	74.9	−0.027	NS
Serum iron, ng/mL	64	92.2	35.3	85.1	16.2	−0.012	NS
Ferritin, ng/mL	95	103.0	89.1	156.5	101.4	0.038	0.032

Categorical variables	total n	RLS− %	RLS+ %	Logistic regression adjusted R^2	Logistic regression P ≤
Sex (females)	184	22.2	37.6	0.007	NS
Excessive daytime somnolence	178	93.4	96.3	−0.004	NS
Cataplexy	183	97.4	100.0	−0.002	NS
Sleep paralysis	169	48.3	69.2	0.017	0.05
Hallucinations	168	59.6	66.7	−0.003	NS
Automatic behaviors	132	61.8	77.3	0.007	NS
Treatment with modafinil	184	40.8	48.1	−0.003	NS
Treatment with SSRI[§]	184	36.3	48.1	0.002	NS
Treatment with sodium oxybate	184	6.4	7.4	−0.005	NS
Treatment with other drugs	184	15.9	18.5	−0.005	NS
No treatment	184	12.9	19.2	0.002	NS

Peu familial: 15%
Formes modérées, pas d'effet sexe
Age de début RLS: 10 ans après NC
Pas d'effet des TTT

⇨ **SJRS comorbide ou secondaire (FDR Meis 1…)** Sleep 2010

Citation: Chhangani BS; Roehrs TA; Harris EJ; Hyde M; Drake C; Hudgel DW; Roth T. Pain sensitivity in sleepy pain-free normals. *SLEEP* 2009;32(8):1011-1017.

Pain Sensitivity in Sleepy Pain-Free Normals

Bantu Samridhi Chhangani, MD; Timothy A. Roehrs, PhD; Erica J. Harris, BS; Maren Hyde, MS; Christopher Drake, PhD; David W. Hudgel, MD; Thomas Roth, PhD

Sleep Disorders & Research Center, Henry Ford Health System, Detroit, MI

Table 1—Study Group Demographics

Characteristics	Sleepy	Non-sleepy
Women/Men	6/8	10/3
Age (years)	26.4 ± 4.9	25.2 ± 4.2
Screening sleep efficiency (%)	94.7 ± 2.4*	83.0 ± 10.5
Habitual time in bed (hours)	7.43 ± 1.3	7.85 ± 0.6
MSLT mean sleep latency (minutes)	4.76 ± 3.3*	12.55 ± 5.0
Epworth Sleepiness Scale (ESS)	5.87 ± 4.67	5.00 ± 1.86

*P < 0.001. MSLT = Multiple sleep latency test
All values above reflect mean and the standard deviation

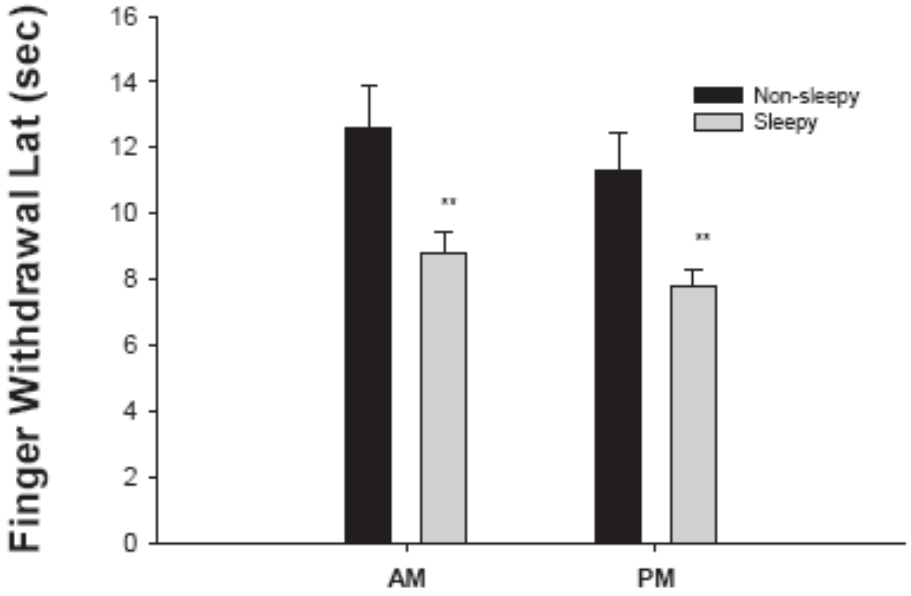
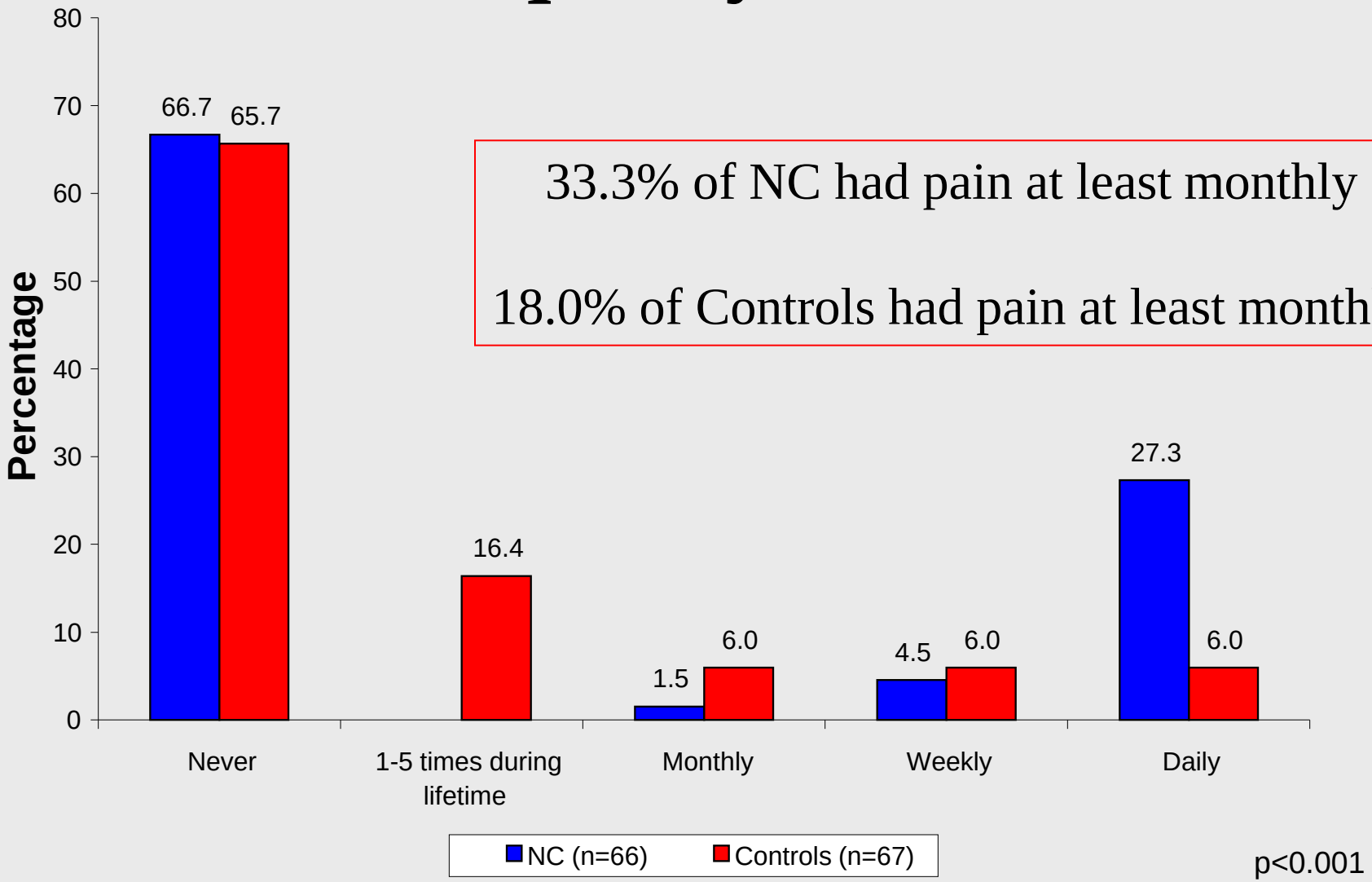


Figure 2—Mean finger withdrawal latency (sec) over the 5 stimulus intensities for non-sleepy and sleepy participants on the morning (AM: 10:30) and afternoon (PM: 14:30) tests. Groups differed on both tests: **P < 0.001; main effect of group and no group by time of day interaction.

Frequency of Pain



33.3% of NC had pain at least monthly

18.0% of Controls had pain at least monthly

p<0.001

High correlation between to clinically-assessed Pain and Pain (SF36)
r = 0.709*, p<0.001

Dauvilliers et al Submitted

Comorbidités SAOS/ cardiovasculaires

Sleep Medicine xxx (2009) xxx–xxx

Contents lists available at ScienceDirect

Sleep Medicine

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

Original Article

Is obstructive sleep apnea a problem in Parkinson's disease?

Valérie Cochen De Cock [a,b], Maher Abouda [a], Smaranda Leu [a,b], Delphine Oudiette [a,d], Emmanuel Roze [b], Marie Vidailhet [b,d], Thomas Similowski [c], Isabelle Arnulf [a,d,*]

Patients	Controls	Unselected PD	Sleepy PD
No.	50	50	50
Age, y	62.4 ± 13.8	62.1 ± 9.8	62.7 ± 8.5
Sex, % men	70	70	70
Body mass index, kg/m^2	24.7 ± 4.6	24.5 ± 3.2	24.8 ± 4.5
Disease course, y	NA	6.8 ± 4.0	8.2 ± 5.1
Motor disability while treated,* score/108	NA	16.8 ± 10.1	27.6 ± 16.0[b]
Use of dopamine agonists, %	NA	56.0	60.0
Dopaminergic treatment, mg/day	NA	583 ± 367	793 ± 423[§]
Use of benzodiazepine, %	10	26	28
Use of antidepressant at bedtime, %	4[‡]	28	24
Mini-Mental State Examination, score/30	NA	28.2 ± 2.4	27.7 ± 2.2
Epworth sleepiness scale, score/24	5.8 ± 4.0[‡]	9.2 ± 4.7	13.2 ± 4.7[§]
% sleepy patients, with score > 10	12[‡]	36	66[§]
Cardiovascular events,† % patients with	39	10	38[§]

Sleep measures	Controls	Unselected PD	Sleepy PD
No.	50	50	50
Night-time sleep, min			
Total sleep period	450 ± 105	507 ± 93	449 ± 69†
Total sleep time	376 ± 77*	347 ± 108	336 ± 85
Wakefulness after sleep onset	90 ± 61*	161 ± 88	117 ± 73†
Latency to, min			
Sleep onset	30 ± 33	52 ± 52	13 ± 16†
REM sleep onset	100 ± 54	146 ± 111	116 ± 84
Sleep stages, % total sleep time			
Stage 1	7 ± 7	4 ± 5	12 ± 14†
Stage 2	54 ± 15	59 ± 14	49 ± 15†
Stage 3–4	21 ± 13	18 ± 10	27 ± 11†
REM sleep	17 ± 8	19 ± 10	12 ± 7†
Sleep fragmentation with			
Arousals/hr	25 ± 20	15 ± 11	25 ± 20†
Periodic legs movements/hr	7 ± 17	12 ± 17	10 ± 21
Patients with OSA, %	40	20	34
Apnea–hypopnea/hr	23 ± 23*	6 ± 11	17 ± 16†
Apnea/hr	10 ± 15	4 ± 9	8 ± 12
Obstructive, %	67 ± 36	73 ± 41	80 ± 31
Central and mixed, %	23 ± 33	18 ± 31	9 ± 17
Minimum oxygen saturation	84 ± 8*	88 ± 8	85 ± 6

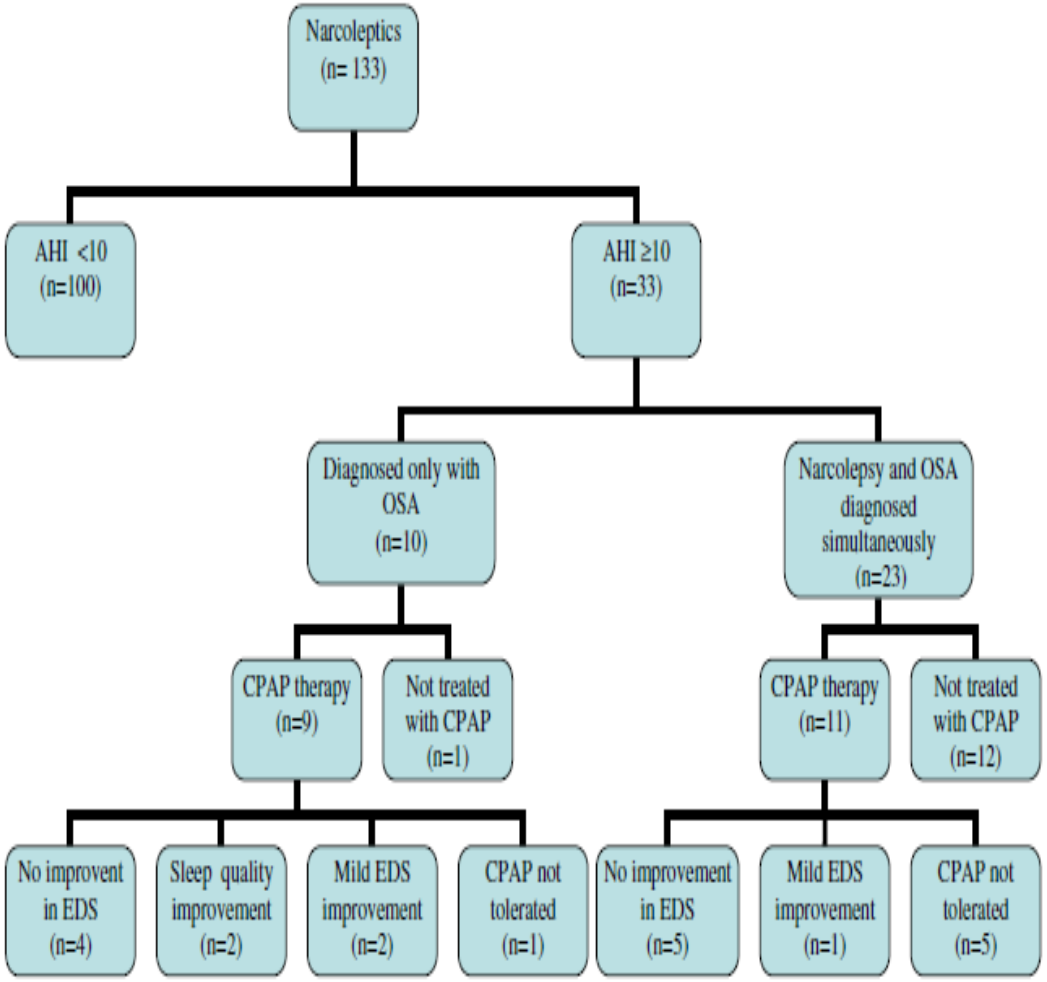
Original Article

Obstructive sleep apnea in narcolepsy

Sleep Medicine 11 (2010) 93–95

Gemma Sansa [1], Alex Iranzo, Joan Santamaria *

Neurology Service, Hospital Clínic, Institut d'Investigació Biomèdiques August Pi i Sunyer (IDIBAPS), and Centro de Investigación Biomédica en Red sobre Enfermedades Neurodegenerativas (CIBERNED), Barcelona, Spain



	AHI ⩾ 10 (*n* = 33)	AHI < 10 (*n* = 100)	*P* value
AHI (*n*) (range)	28.5 ± 15.7 (11–67)	2.9 ± 2.6 (0–9)	<0.0001 *
Male/female (*n*)	28/5	60/40	0.0063 *
Age (years)	49.3 ± 15.4	35.4 ± 15.5	<0.0001 *
BMI (kg/m^2)	25.3 ± 4.0	23.4 ± 4.8	0.0368 *
Cataplexy (%)	78.8	78	0.6378
ESS score at the time of diagnosis of narcolepsy	18.8 ± 4.4	17.4 ± 4.2	0.152
Sleep efficiency in PSG (%)	80.8 ± 13.8	84.8 ± 12.2	0.1941
Sleep latency in MSLT (min)	2.1 ± 2.1	2.1 ± 1.7	0.7755
REM sleep latency in MSLT (min)	4.8 ± 2.6	4.8 ± 2.8	0.7142
SOREM periods in MSLT (*n*)	3.1 ± 1.4	3.3 ± 1.4	0.2421

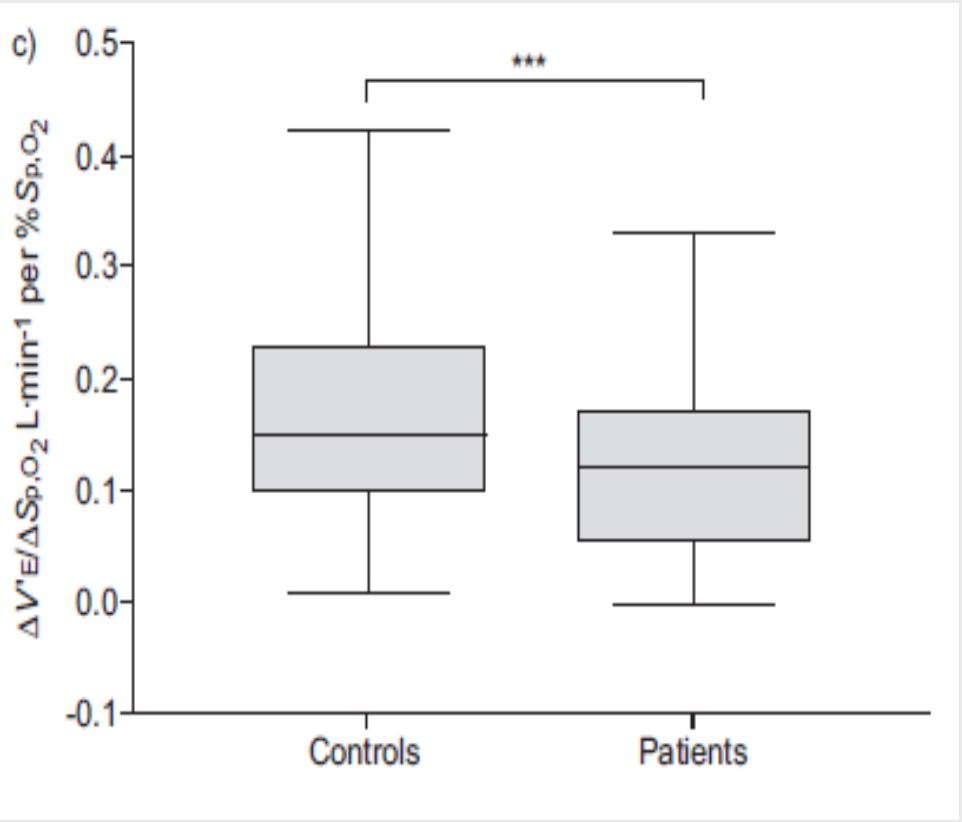
Eur Respir J 2010; 36: 577–583
DOI: 10.1183/09031936.00174609

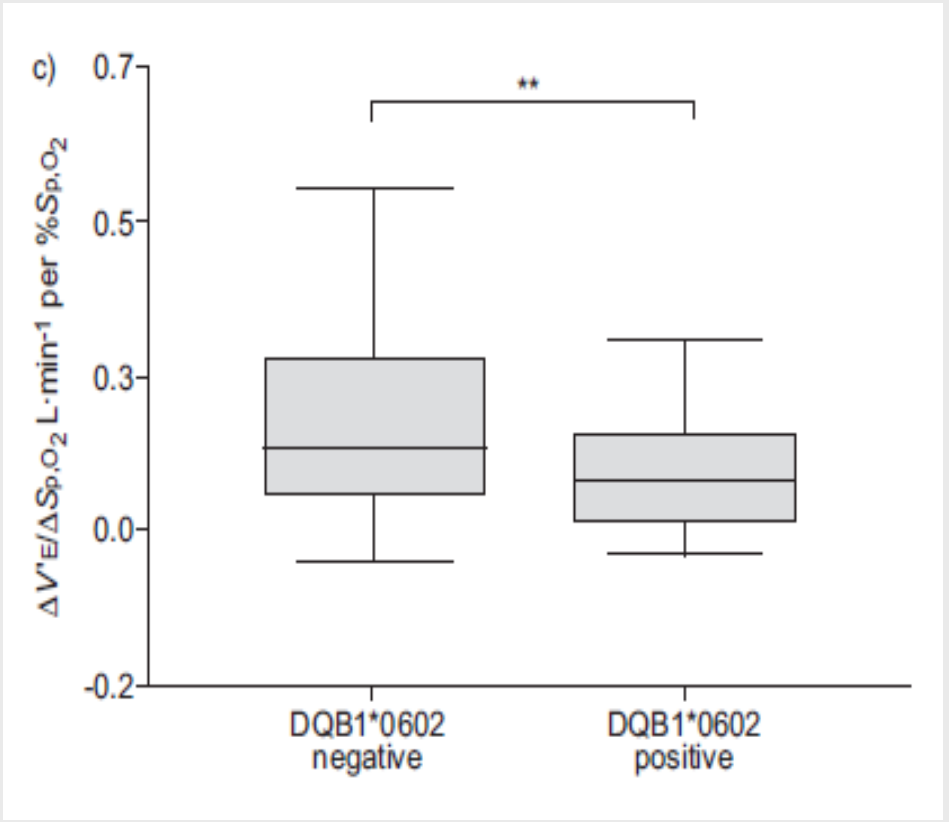
Ventilatory chemoresponsiveness, narcolepsy–cataplexy and human leukocyte antigen DQB1*0602 status

F. Han*, E. Mignot#, Y.C. Wei*, S.X. Dong*, J. Li*, L. Lin#, P. An*, L.H. Wang*, J.S. Wang*, M.Z. He*, H.Y. Gao*, M. Li*, Z.C. Gao* and K.P. Strohl¶

130 NC et 117 témoins:

Baisse de la réponse à l'hypoxie: Indépendante de AHI mais liée au HLA+





Body Mass Index-Independent Metabolic Alterations in Narcolepsy with Cataplexy

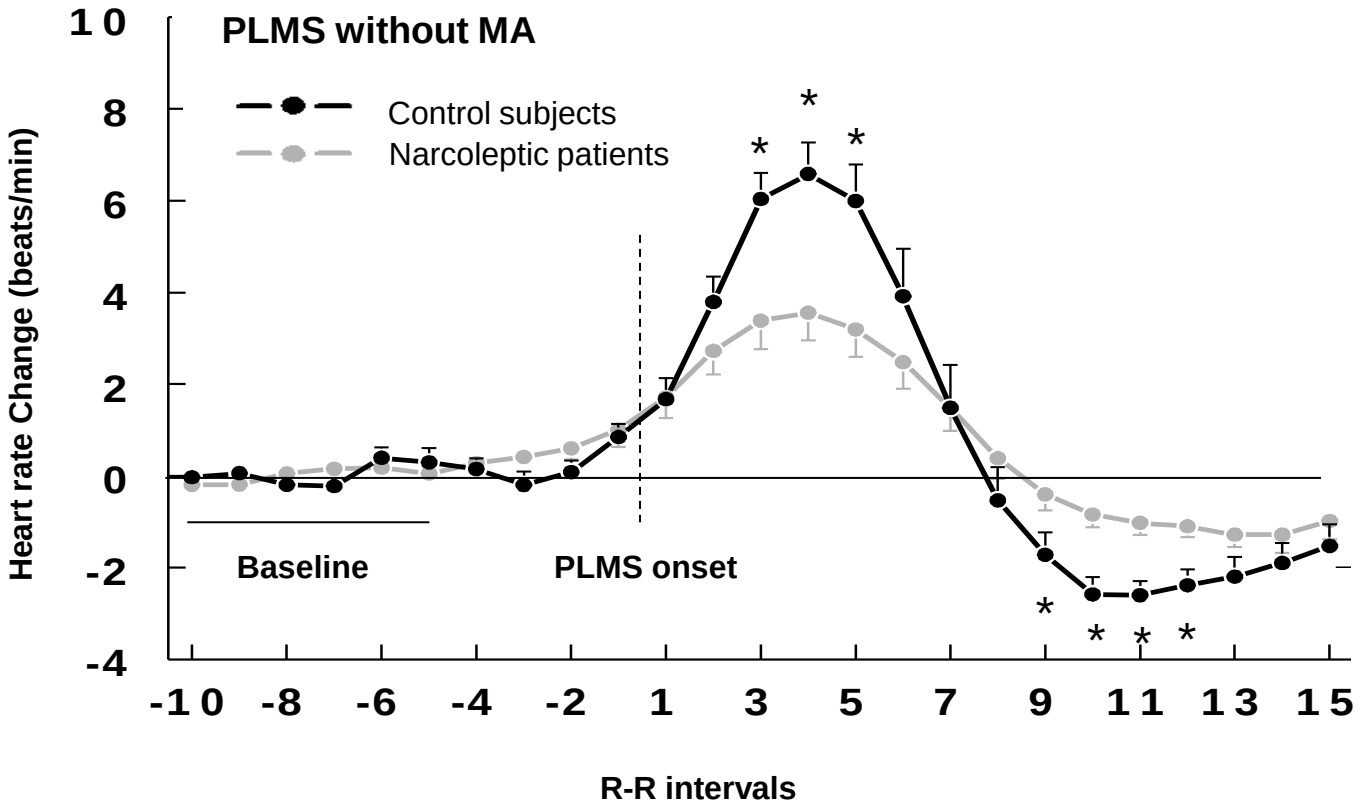
Francesca Poli, MD[1]; Giuseppe Plazzi, MD[1]; Guido Di Dalmazi, MD[2]; Danilo Ribichini, MD[2]; Valentina Vicennati, MD[2]; Fabio Pizza, MD[1]; Emmanuel Mignot, MD[3]; Pasquale Montagna, MD[1]; Renato Pasquali, MD[2]; Uberto Pagotto, MD[2]

	Patients with NC	Patients with IH	P value	P value[a]
No.	14	14		
Weight, kg	89.8 ± 16.2	76.6 ± 11.0	0.019	-
BMI, kg/m^2	28 ± 4.4	24.2 ± 2.8	0.012	-
Waist circumference, cm	102 ± 11	86 ± 8	< 0.001	0.001
Waist-to-hip ratio	0.95 ± 0.06	0.87 ± 0.04	0.003	NS
Adipose tissue, cm^2				
Total	67796.76 ± 18101.60	46311.15 ± 8666.90	0.004	NS
Subcutaneous	41104.15 ± 10342.59	27860.41 ± 6115.44	0.003	NS
Visceral	26692.61 ± 9692.18	18450.73 ± 3207.27	0.025	NS
Blood pressure, mm Hg				
Systolic	139 ± 16	128 ± 13	NS	NS
Diastolic	86 ± 11	78 ± 10	0.043	NS
Clinostatic heart rate, bpm	71 ± 8	71 ± 7	NS	NS

	Patients with NC	Patients with IH	P value	P value[a]
No.	14	14		
Cholesterol, mg/dL				
Total	201 ± 45	157 ± 37	0.016	NS
LDL	139 ± 46	102 ± 25	NS	NS
HDL	36 ± 11	52 ± 15	0.004	0.049
Triglycerides, mg/dL	179 ± 64	112 ± 57	0.008	NS
Glucose, mg/dL	80.4 ± 8.1	79.5 ± 12.4	NS	NS
Insulin, mcU/mL	11.3 ± 7.1	6.8 ± 3.3	0.047	NS
AUC glucose, mcU*mlL/min	22591 ± 4110	22399 ± 4661	NS	NS
AUC insulin, mcU*mL/min	15565 ± 12923	7519 ± 3031	0.040	NS
GLU/IRI	8.4 ± 2.9	13.2 ± 5.8	0.012	0.040
HOMA	2.2 ± 1.4	1.3 ± 0.5	0.034	NS
$HOMA_{OGTT}$	5.0 ± 2.4	7.5 ± 3.9	NS	NS
QUICKI	0.33 ± 0.05	0.39 ± 0.04	0.008	NS
Leptin, ng/mL	7.8 ± 4.2	3.9 ± 2.2	0.005	NS

9/14 NC = 64.3% ont un Sd métabolique / 0 chez HI

Autonomic response to periodic leg movements in sleep in narcolepsy-cataplexy



Dauvilliers et al In press 2010

Excessive Daytime Sleepiness Is an Independent Risk Indicator for Cardiovascular Mortality in Community-Dwelling Elderly

The Three City Study

Jean-Philippe Empana, MD, PhD; Yves Dauvilliers, MD, PhD; Jean-François Dartigues, MD, PhD; Karen Ritchie, PhD; Jerome Gariepy, MD; Xavier Jouven, MD, PhD; Christophe Tzourio, MD, PhD; Philippe Amouyel, MD, PhD; Alain Besset, PhD; Pierre Ducimetiere, PhD

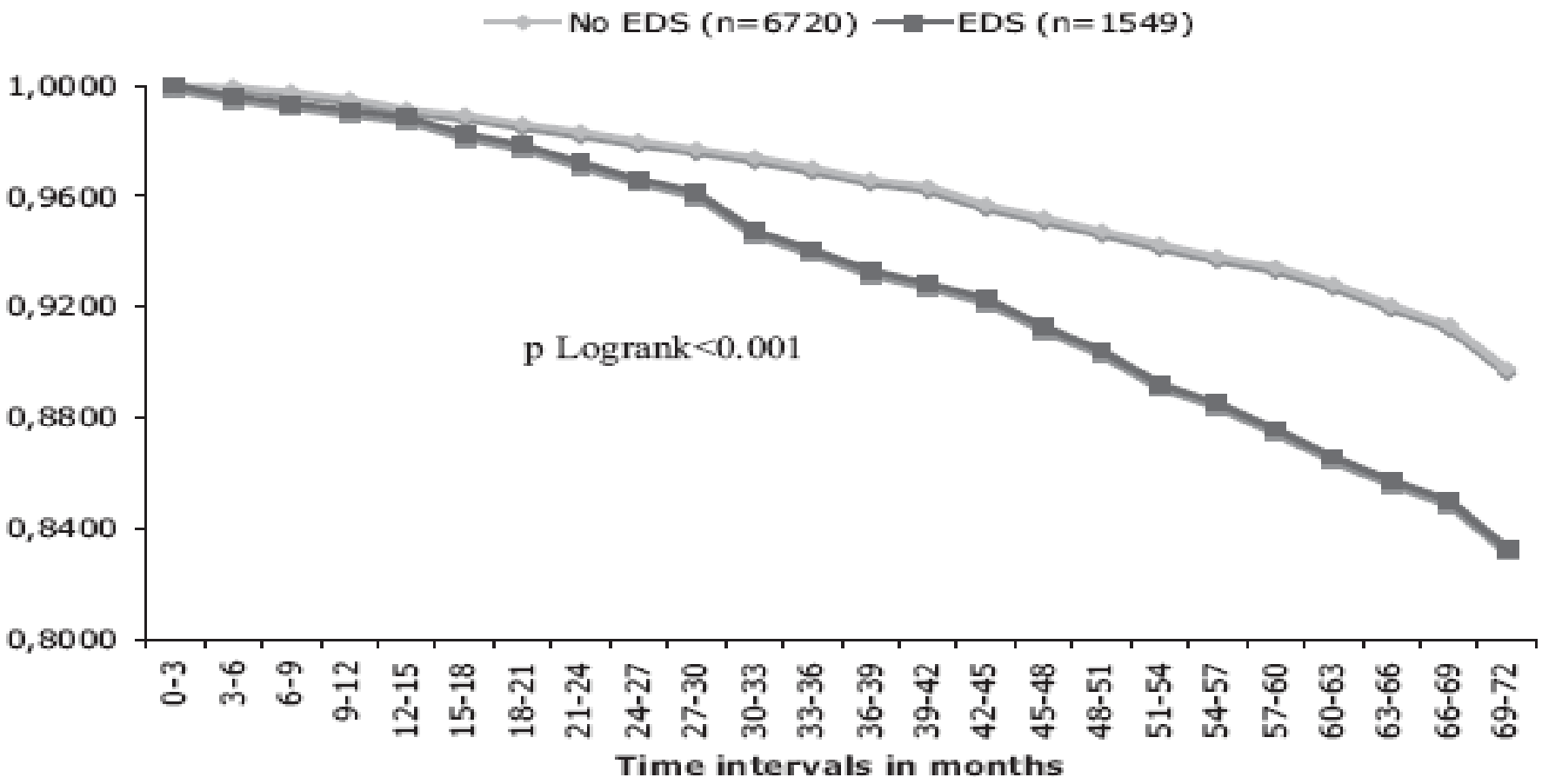


Table 2. Hazard Ratios and 95% CI of 6-Year Mortality for Excessive Daytime Sleepiness: The Three City Study

	Events, n (%)	Model 1 HR and 95% CI	Model 2 HR and 95% CI	Model 3 HR and 95% CI
Total mortality n=762				
No EDS	546 (8, 1)	1	1	1
EDS	216 (14.0)	1.42 (1.21–1.68)	1.33 (1.13–1.61)	1.29 (1.07–1.55)
Cancer mortality n=260				
No EDS	200 (3.0)	1	1	1
EDS	60 (3.9)	1.09 (0.80–1.47)	1.12 (0.81–1.54)	1.14 (0.82–1.58)
CV mortality n=196				
No EDS	132 (2, 0)	1	1	1
EDS	64 (4.2)	1.76 (1.28–2.41)	1.49 (1.05–2.10)	1.46 (1.02–2.09)

Hazard ratios (HR) and their 95% CI were derived from Cox proportional hazard regression analysis.

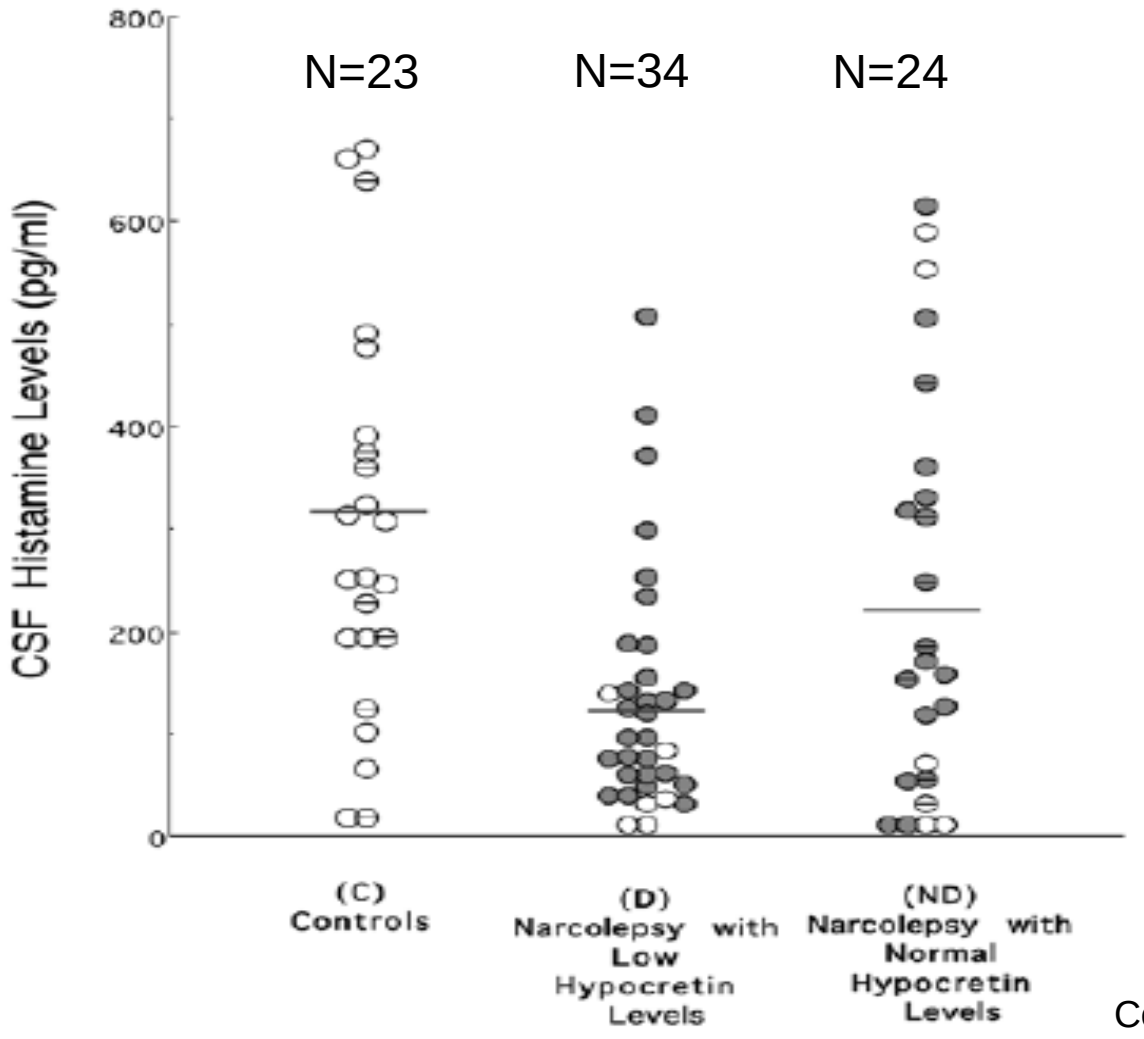
Model 1 was adjusted for age, gender, and the study-centre; Model 2 was adjusted for risk factors included in model 1 and prior CVD, BMI, daily alcohol consumption, current smoking status, diabetes, MMSE, systolic blood pressure, total and HDL cholesterol, antihypertensive and lipids lowering medications; Model 3 was adjusted for risk factors included in model 2 and medications for sleep and depressive symptoms.

Biologie

CSF HISTAMINE LEVELS AND NARCOLEPSY

Decreased CSF Histamine in Narcolepsy With and Without Low CSF Hypocretin-1 in Comparison to Healthy Controls

Seiji Nishino, MD, PhD[1]; Eiko Sakurai, PhD[2]; Sona Nevsimalova, MD, DSc[3]; Yasushi Yoshida, MD, PhD[1]; Takehiko Watanabe, MD, PhD[2]; Kazuhiko Yanai, MD, PhD[2]; Emmanuel Mignot, MD, PhD[1]

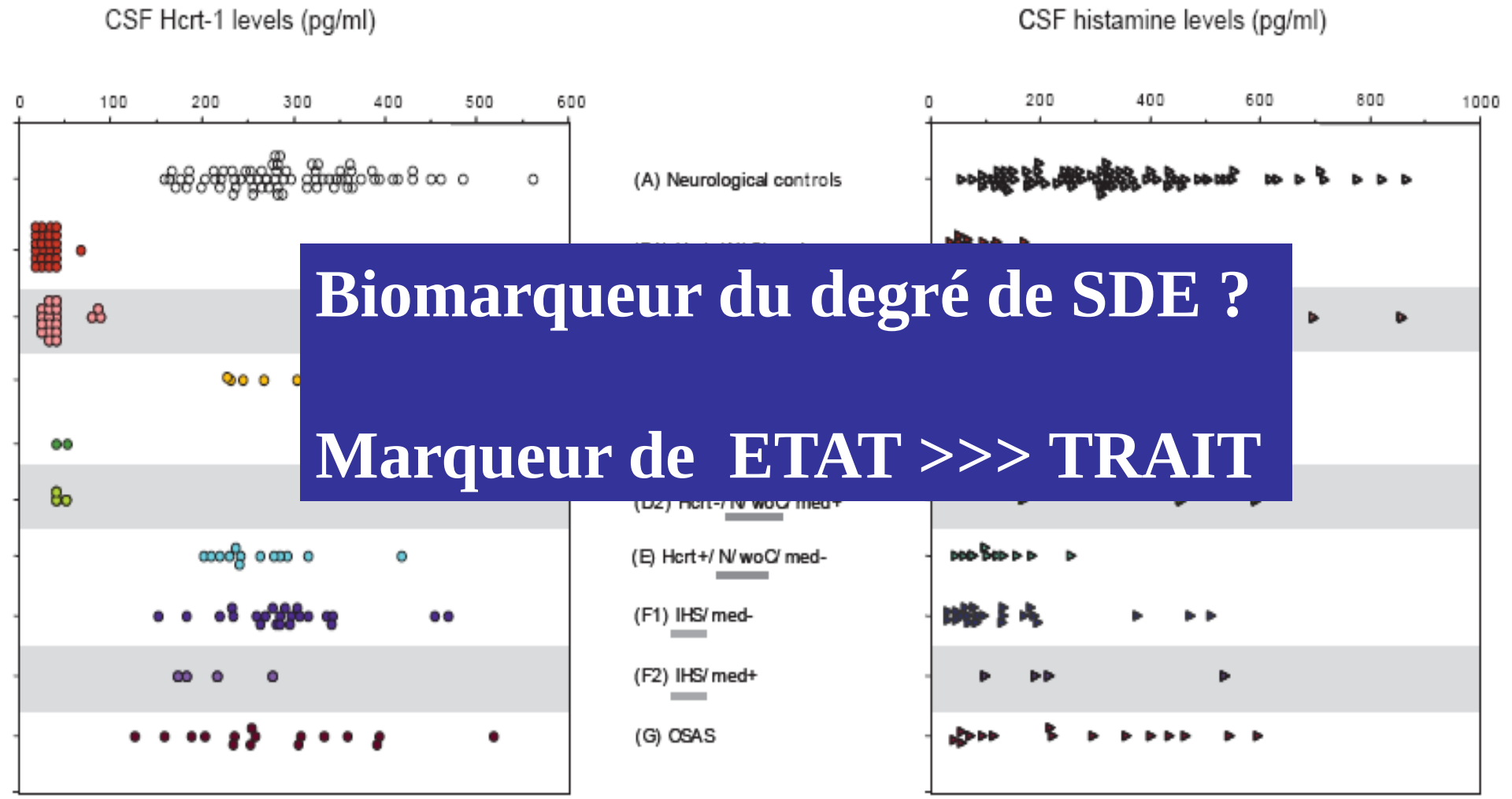


Cercles pleins: Traitement

CSF HISTAMINE LEVELS AND NARCOLEPSY

CSF Histamine Contents in Narcolepsy, Idiopathic Hypersomnia and Obstructive Sleep Apnea Syndrome

Takashi Kanbayashi, MD, PhD[1]; Tohru Kodama, MD, PhD[2]; Hideaki Kondo, MD[1]; Shinsuke Satoh, MD, PhD[3]; Yuichi Inoue, MD, PhD[4]; Shigeru Chiba, MD, PhD[5]; Tetsuo Shimizu, MD, PhD[1]; Seiji Nishino, MD, PhD[6]

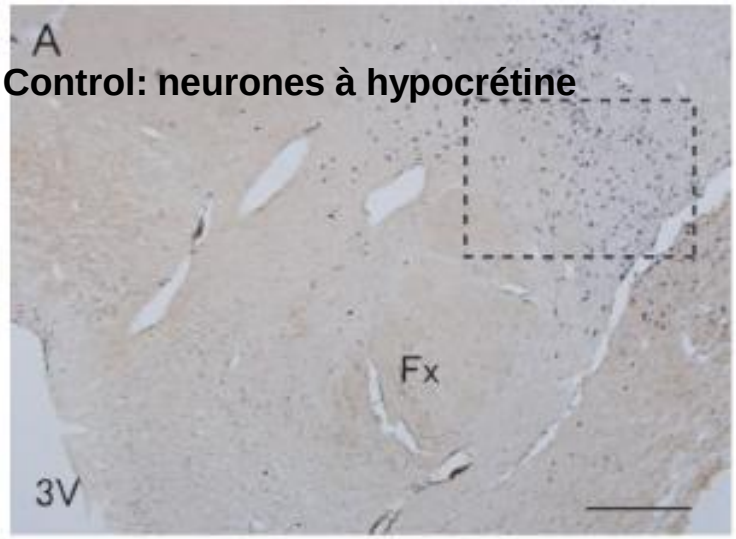


Biomarqueur du degré de SDE ?

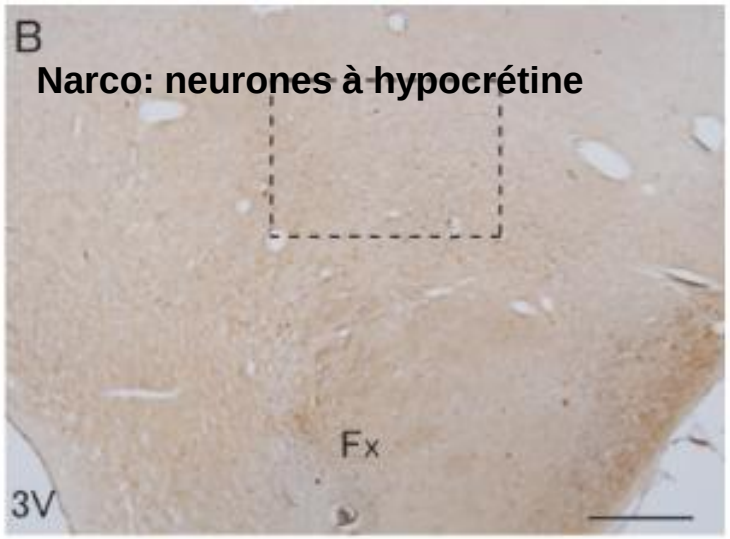
Marqueur de ETAT >>> TRAIT

Absence of ubiquitinated inclusions in hypocretin neurons of patients with narcolepsy

M. Honda, MD, PhD
T. Arai, MD, PhD
M. Fukazawa
Y. Honda, MD, PhD
K. Tsuchiya, MD, PhD
A. Salehi, MD, PhD
H. Akiyama, MD, PhD
E. Mignot, MD, PhD



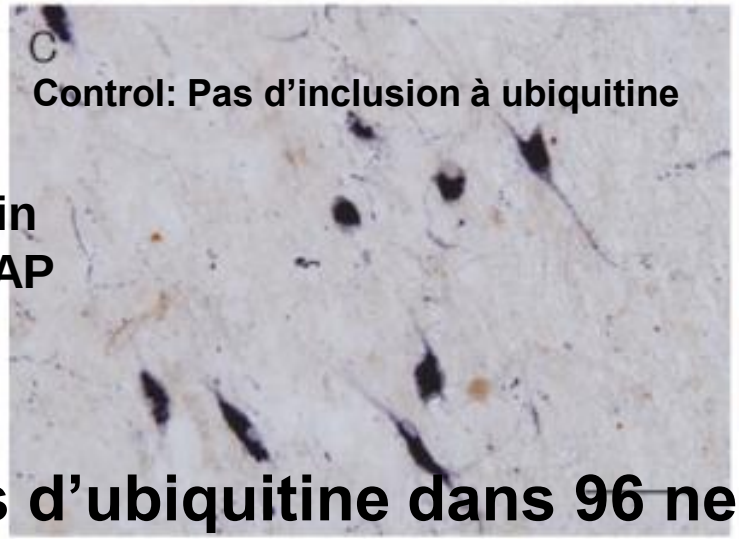
Control: neurones à hypocrétine



Narco: neurones à hypocrétine

4 narco cata
5 controls

Ac contre ubiquitin
Inflammation, GFAP
Amyloide, tau…



Control: Pas d'inclusion à ubiquitine

Narco: Pas d'inclusion à ubiquitine

Pas d'ubiquitine dans 96 neurones à hypocrétine

RAPID PUBLICATION

Elevated Anti-Streptococcal Antibodies in Patients with Recent Narcolepsy Onset

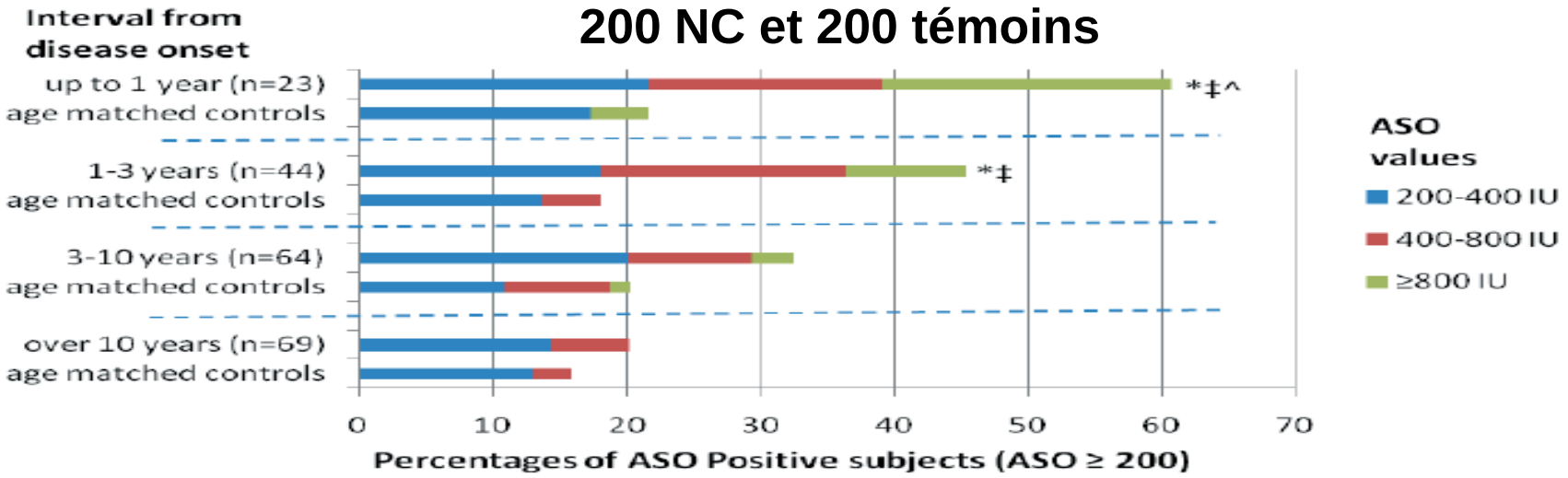
Adi Aran, MD[1]; Ling Lin, MD, PhD[1]; Sona Nevsimalova, MD[2]; Giuseppe Plazzi, MD[3]; Seung Chul Hong, MD[4]; Karin Weiner, PhD[1]; Jamie Zeitzer, PhD[1]; Emmanuel Mignot, MD, PhD[1]

[1]Center for Sleep Sciences and Department of Psychiatry, Stanford University School of Medicine, Palo Alto, CA; [2]Department of Neurology, Charles University in Prague, 1st Faculty of Medicine and General Teaching Hospital, Prague, Czech Republic; [3]University of Bologna, Bologna, Italy; [4]Department of Psychiatry, St. Vincent's Hospital, The Catholic University of Korea, Suwon, Korea

Figure 1A and B—Anti-Streptococcal Antibodies in Patients with Narcolepsy and Age Matched Controls

A: Anti-streptolysin O (ASO) antibodies

200 NC et 200 témoins



* OR = 5.6 (up to 1 year); 3.8 (1-3 years), P < 0.01 versus ASO ≥ 200 in age matched controls
‡ OR = 6.1 (up to 1 year); 3.3 (1-3 years), P < 0.01 versus ASO ≥ 200 in patients with > 10 years interval from onset
^ OR = 3.2, P < 0.02 compared to ASO ≥ 200 in patients with 3-10 years interval from onset

Infections à strepto /H1N1: FDR de la narcolepsie ?

11 cas français de NC post H1N1

Elevated Tribbles homolog 2–specific antibody levels in narcolepsy patients

Vesna Cvetkovic-Lopes,[1] Laurence Bayer,[1] Stéphane Dorsaz,[2] Stéphanie Maret,[2] Sylvain Pradervand,[3] Yves Dauvilliers,[4] Michel Lecendreux,[5] Gert-Jan Lammers,[6] Claire E.H.M. Donjacour,[6] Renaud A. Du Pasquier,[7,8] Corinne Pfister,[2] Brice Petit,[2] Hyun Hor,[2,4] Michel Mühlethaler,[1] and Mehdi Tafti[2,9]

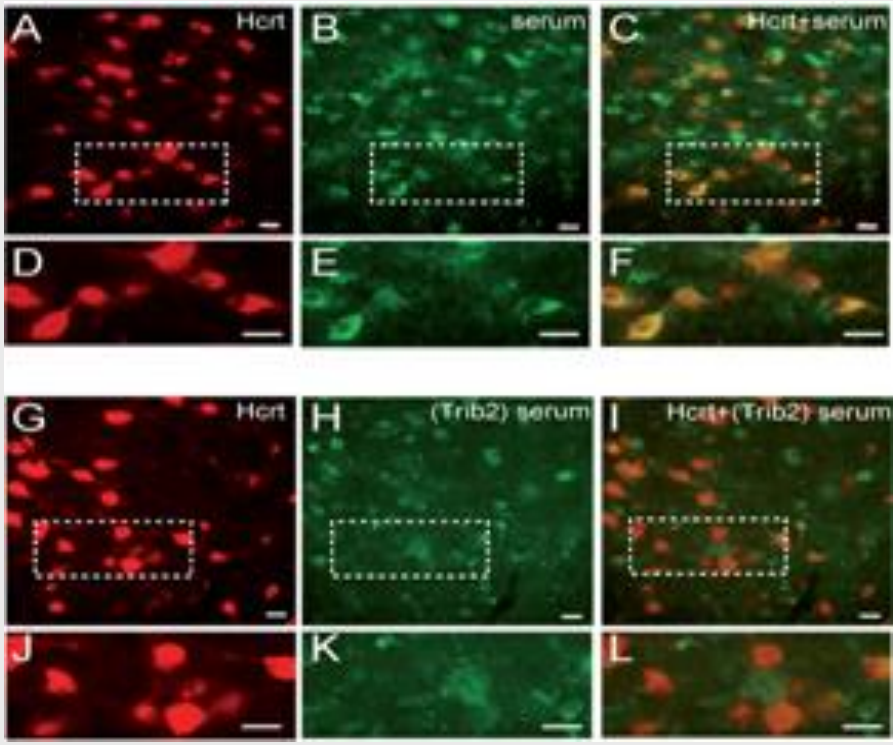
- Souris transgéniques++
- Identification de peptides surexprimés dans neurones à hypocrétine/ cerveau entier:

  Tribbles-Homolog-2 (*Trib2*)
- Developpement d'un Kit

  pour doser ces Ac
- Serum avec taux élevé d'un patient

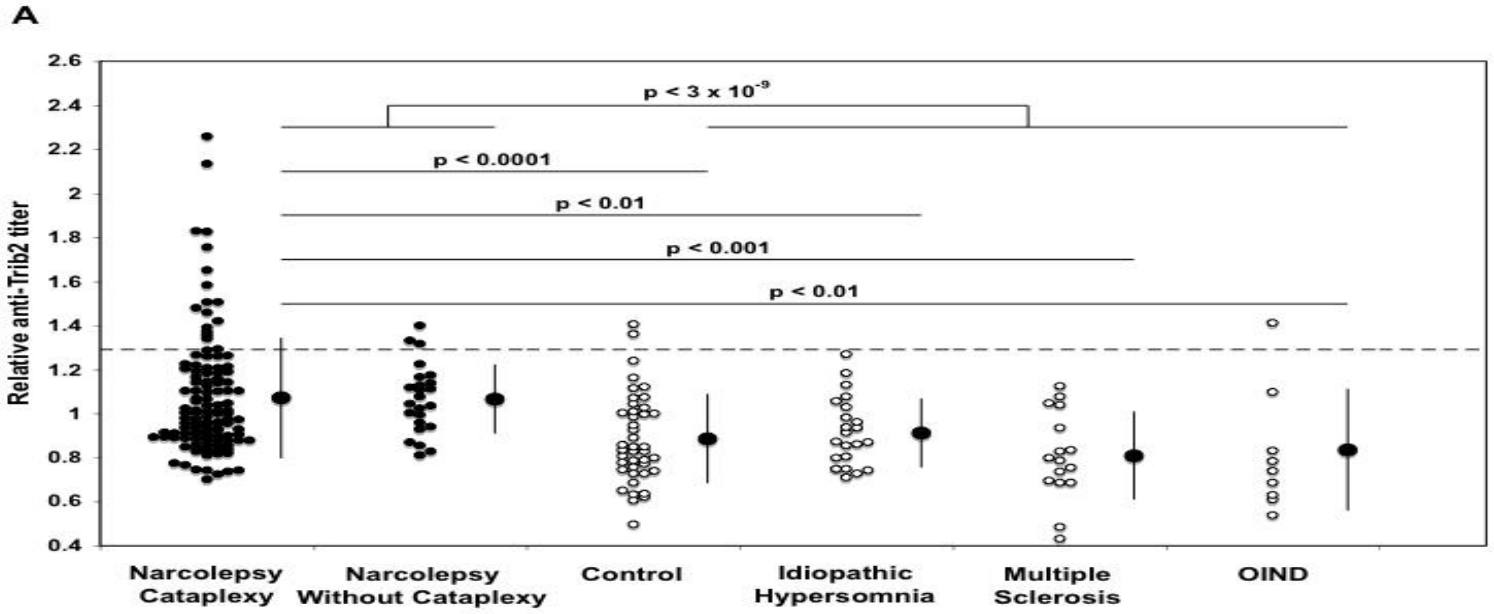
NC : immunoreactivité des neurones à hypocrétine ~90%

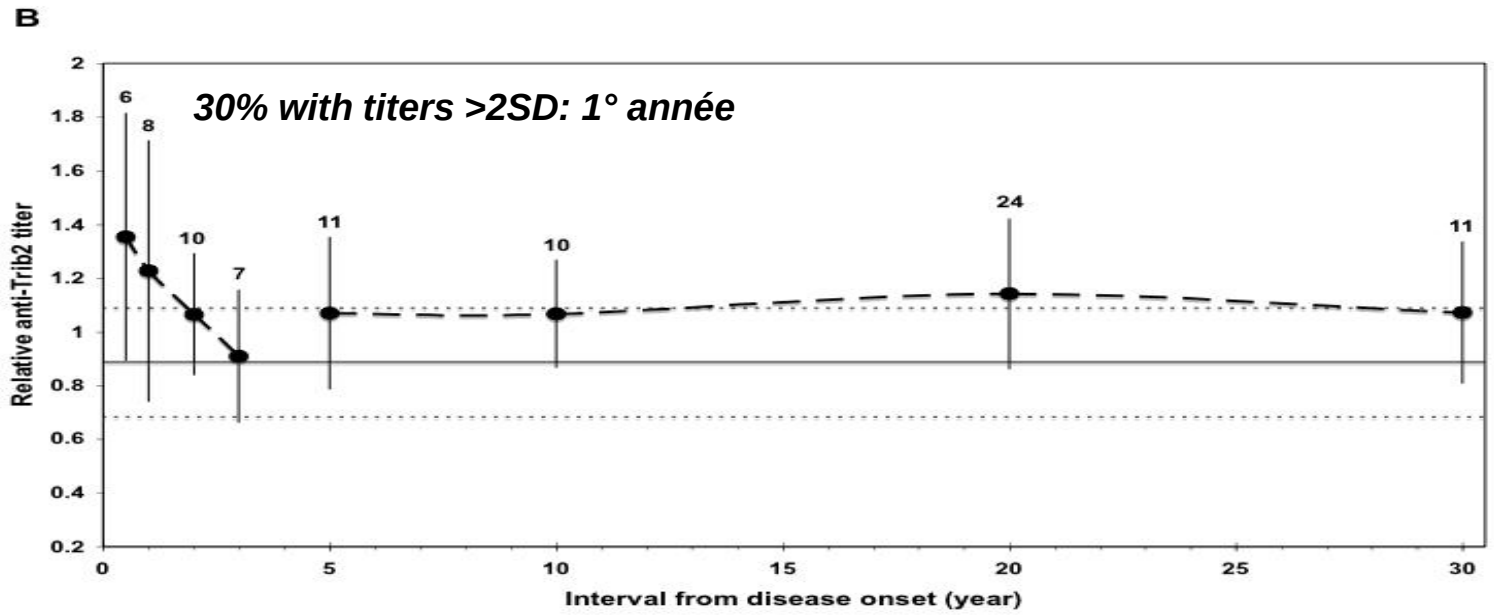
Hcrt/ sera/ hcrt+sera



Pre-absorption of anti-Trib2 abs

17% with titers >2SD





IgG Abnormality in Narcolepsy and Idiopathic Hypersomnia

Susumu Tanaka*, Makoto Honda

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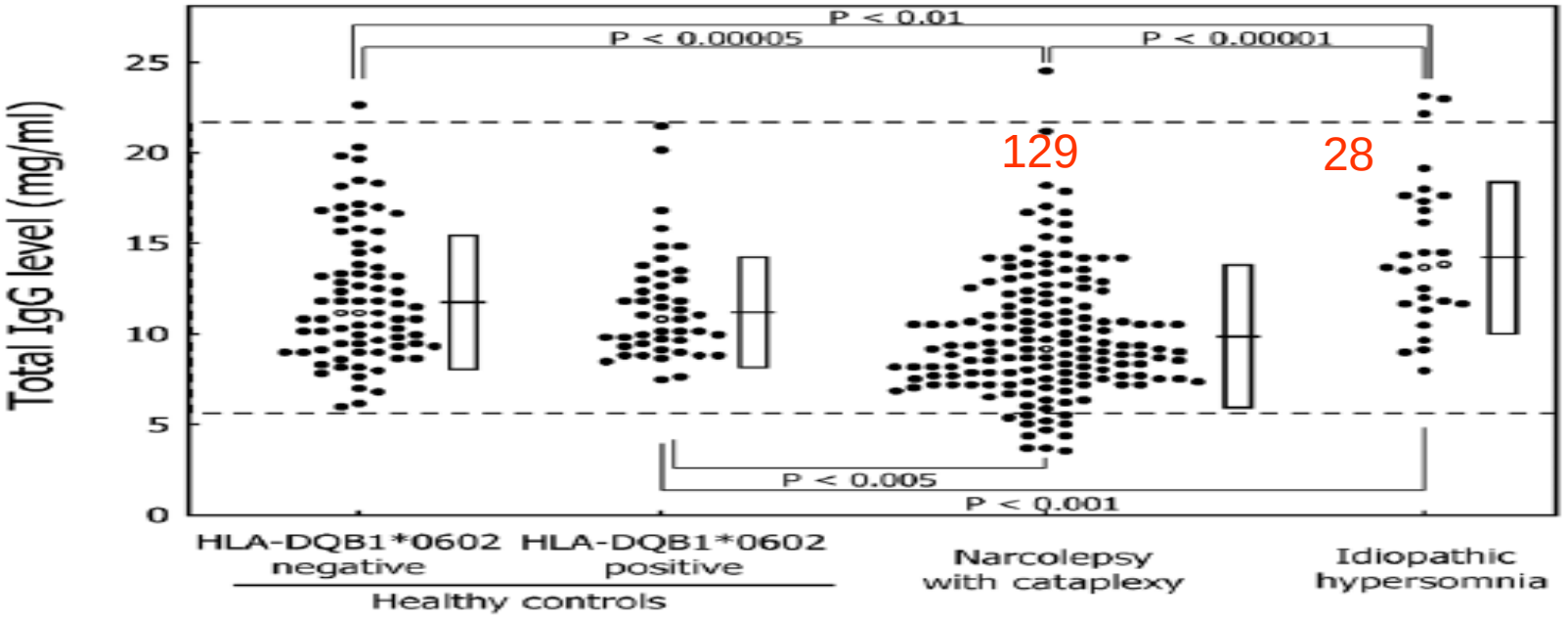

	n	IgG1	IgG2	IgG3	IgG4
Healthy controls					
HLA-DQB1*0602 negative	13	58.55±5.79	34.48±6.68	2.68±1.05	4.30±1.41
HLA-DQB1*0602 positive	14	61.87±9.54	30.70±8.53	3.38±1.31	4.06±2.86
Narcolepsy					
with normal range of IgG	13	56.77±9.79	32.55±9.10	3.67±1.23*	7.06±3.92
with low IgG levels	10	56.60±16.71	33.29±13.95	3.35±1.61	6.83±6.96
Idiopathic hypersomnias	17	62.85±5.61	25.66±6.77**	4.79±2.93**	6.70±4.70
Normal range estimated		46.97–70.14	21.12–47.84	0.57–4.78	1.47–7.12

Clinical/Scientific Notes

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NORMALIZATION OF HYPOCRETIN-1 IN NARCOLEPSY AFTER INTRAVENOUS IMMUNOGLOBULIN TREATMENT

In May 2006, a 28-year-old woman abruptly experienced excessive daytime sleepiness (EDS) and 2 to 3

level that completely reversed after IVIg treatment shortly after disease onset, given additional arguments that narcolepsy might be an autoimmune disease. Another striking finding was the improvement of both cataplexy and EDS after IVIg perfusions. As hypocretin

NC Typique, HLA+, Hypocretine = 0
IVIg à J15: Amélioration des cataplexies, et de SDE
M4 après IVIg: Hypocretine =339 pg/ml

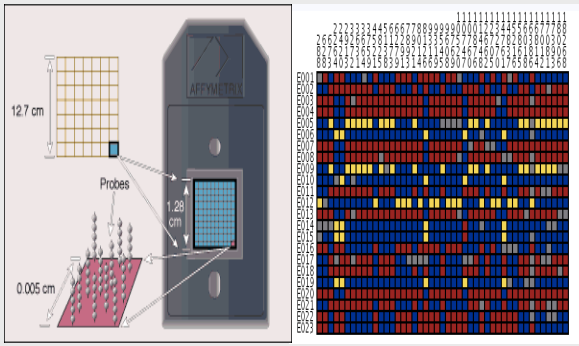
Processus aiguë inflammatoire qui bloque la production d'hypocrétine réversible au début avec IVIg qui pourrait épargner qq neurones hypocrétine

Génétique

nature genetics

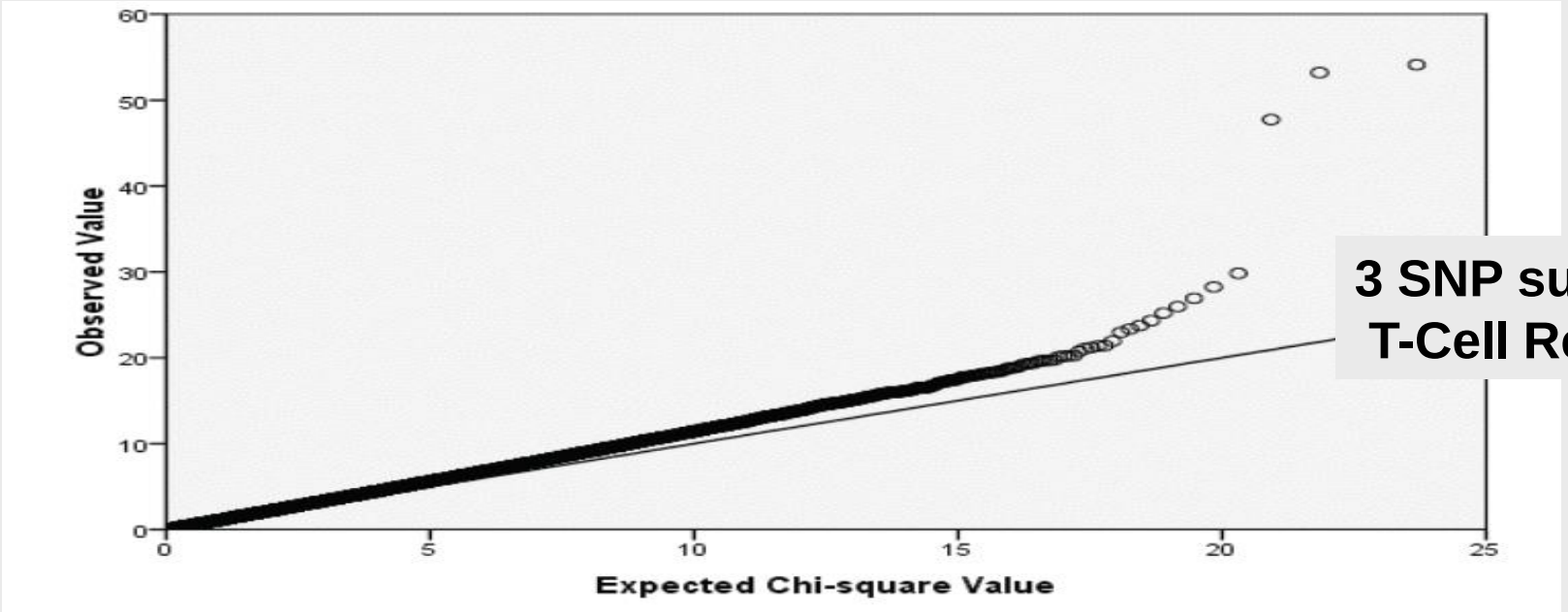
Narcolepsy is strongly associated with the T-cell receptor alpha locus

Joachim Hallmayer[1,2,32], Juliette Faraco[1,2,32], Ling Lin[1,2], Stephanie Hesselson[3], Juliane Winkelmann[4–6], Minae Kawashima[1,2,7], Geert Mayer[8,9], Giuseppe Plazzi[10], Sona Nevsimalova[11], Patrice Bourgin[12], Sheng Seung-Chul Hong[13], Yutaka Honda[14], Makoto Honda[14], Birgit Högl[15], William T Longstreth Jr[16,17], Jacques Montplaisir[18], David Kemlink[11], Mali Einen[1,2], Justin Chen[3], Stacy L Musone[3], Matthew Akana[3], Taku Miyagawa[7], Jubao Duan[19], Alex Desautels[18], Christine Erhardt[12], Per Egil Hesla[20], Francesca Poli[10], Birgit Frauscher[15], Jong-Hyun Jeong[13], Sung-Pil Lee[13], Thanh G N Ton[16,17], Mark Kvale[3], Libor Kolesar[21], Marie Dobrovolná[22], Gerald T Nepom[23], Dan Salomon[24], H-Erich Wichmann[25,26], Guy A Rouleau[27], Christian Gieger[25], Douglas F Levinson[2], Pablo V Gejman[19,28], Thomas Meitinger[4,6], Terry Young[29], Paul Peppard[29], Katsushi Tokunaga[7], Pui-Yan Kwok[3], Neil Risch[3,30] & Emmanuel Mignot[1,2,31]



N = 807 NC (caucasiens) /HLA+ et 1074 Témoins
Réplication 1: 415 cas (USA/Canada) et 753 Témoins
Réplication 2: 392 cas (EU) et 321 Témoins

GWA Affy 500K ou 6.0

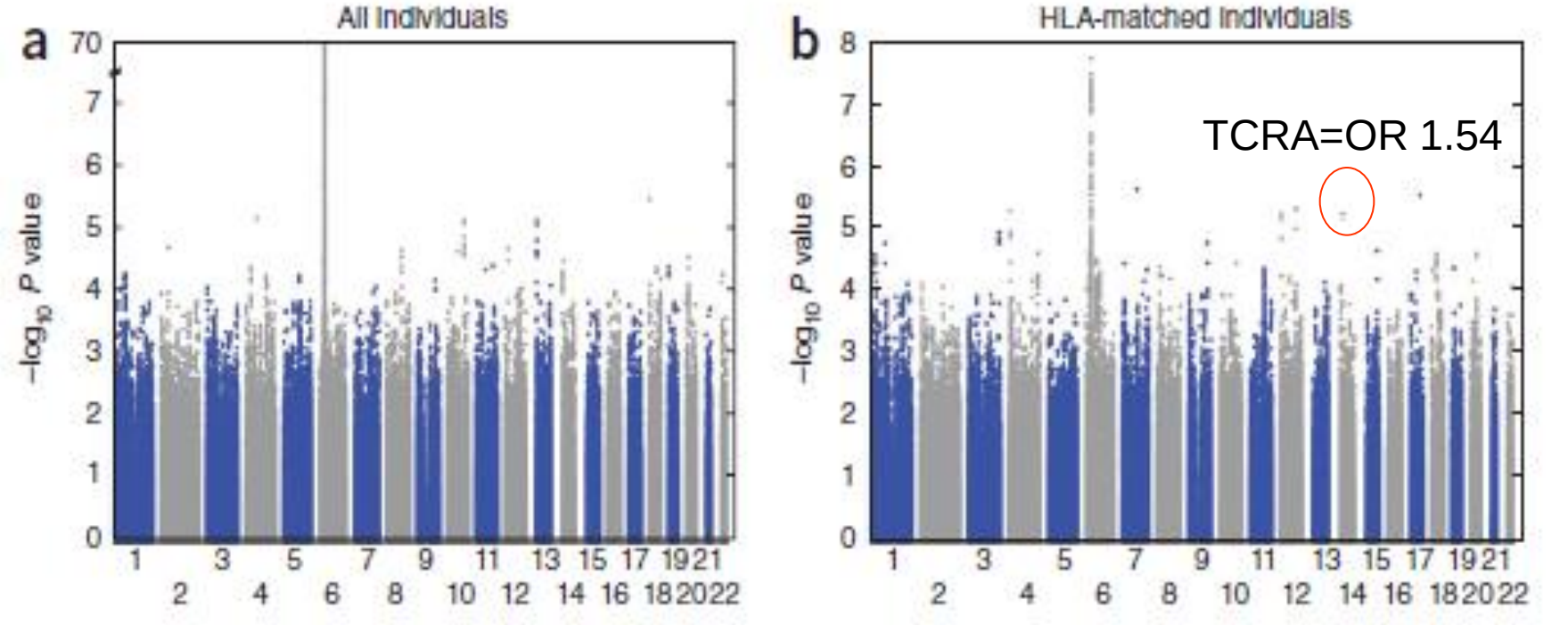


3 SNP sur chr 14
T-Cell Recept A

nature genetics

Genome-wide association study identifies new HLA class II haplotypes strongly protective against narcolepsy

Hyun Hor[1,2,28], Zoltán Kutalik[3,4,28], Yves Dauvilliers[2,5], Armand Valsesia[3,4,6], Gert J Lammers[7], Claire E H M Donjacour[7], Alex Iranzo[8], Joan Santamaria[8], Rosa Peraita Adrados[9], José L Vicario[10], Sebastiaan Overeem[11,12], Isabelle Arnulf[13], Ioannis Theodorou[14], Poul Jennum[15], Stine Knudsen[15], Claudio Bassetti[16], Johannes Mathis[17], Michel Lecendreux[18], Geert Mayer[19], Peter Geisler[20], Antonio Benetó[21], Brice Petit[1], Corinne Pfister[1], Julie Vienne Bürki[1], Gérard Didelot[1], Michel Billiard[5], Guadalupe Ercilla[22], Willem Verduijn[23], Frans H J Claas[23], Peter Vollenwider[24], Gerard Waeber[24], Dawn M Waterworth[25], Vincent Mooser[25], Raphaël Heinzer[26], Jacques S Beckmann[3,27], Sven Bergmann[3,4] & Mehdi Tafti[1,26]



562 NC Européens et 702 témoins

Réplication chez 370 NC et 495 témoins HLA+

Table 2 *Trans* **HLA haplotype and rs2858884-C allele frequency in** ***HLA-DRB1*1501-DQB1*0602*** **heterozygous cases and controls**

	Sample size		Case-control association			Allele frequency (rs2858884-C)		rs2858884 association	
DRB1-DQB1 haplotype	Cases	Controls	OR	CI_{95}	*P*	Cases	Controls	Effect size	*P*
DRB1*01-DQB1*05	52	66	0.79	[0.53–1.16]	0.236	0.14	0.10	–0.04	0.437
DRB1*03-DQB1*02	54	80	0.68	[0.46–0.98]	0.0394	0.32	0.41	0.56	3.35×10^{-43}
DRB1*04-DQB1*03	81	81	1.00	[0.71–1.41]	1.00	0.03	0.06	–0.21	1.66×10^{-7}
DRB1*0701-DQB1*0202	40	40	1.00	[0.63–1.58]	1.00	0.11	0.09	–0.08	0.174
DRB1*0701-DQB1*0303	7	15	0.47	[0.19–1.16]	0.129	0.00	0.03	–0.23	0.0258
DRB1*08-DQB1*04	22	14	1.57	[0.79–3.11]	0.234	0.02	0.11	–0.16	0.0423
DRB1*09-DQB1*03	2	8	0.25	[0.05–1.18]	0.107	0.00	0.06	–0.17	0.259
DRB1*10-DQB1*05	1	8	0.12	[0.02–1.00]	0.0381	0.00	0.25	0.18	0.268
DRB1*11-DQB1*03	65	55	1.18	[0.80–1.74]	0.431	0.08	0.05	–0.17	3.64×10^{-4}
DRB1*12-DQB1*03	4	7	0.57	[0.17–1.97]	0.546	0.00	0.00	–0.27	0.0594
DRB1*1301-DQB1*0603	**1**	**51**	**0.02**	**[0.00–0.14]**	**5.28×10^{-14}**	**0.00**	**0.30**	**0.35**	**2.93×10^{-7}**
DRB1*1302-DQB1*0604	34	20	1.70	[0.96–3.01]	0.0687	0.09	0.12	–0.07	0.298
DRB1*1302-DQB1*0609	3	5	0.60	[0.14–2.53]	0.725	0.33	0.40	0.49	4.10×10^{-3}
DRB1*1303-DQB1*0301	15	7	2.14	[0.86–5.31]	0.129	0.03	0.07	–0.18	0.0757
DRB1*14-DQB1*05	17	22	0.77	[0.40–1.48]	0.513	0.12	0.05	–0.12	0.123
DRB1*16-DQB1*05	**28**	**9**	**3.11**	**[1.45–6.68]**	**2.26×10^{-3}**	**0.11**	**0.00**	**–0.11**	**0.163**
	426	488				0.11	0.16		

HLA-*DQ603*: (*P* < 6 x 10-14).

OR: 0.02: Effet protecteur++

CNV: Résultat négatif

Narcolepsie = Maladie du HLA++

Parasomnies

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Original Article

Violent behavior during sleep: Prevalence, comorbidity and consequences

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	N	%	95% C.I.
Total	19,961	1.6	(1.4–1.7)
Country			
United Kingdom	4972	2.1	(1.7–2.5)
Germany	4115	1.8	(1.4–2.2)
Italy	3970	1.8	(1.4–2.2)
Portugal	1857	1.3	(0.8–1.8)
Spain	4065	0.7	(0.4–1.0)*
Finland	982	0.9	(0.3–1.6)
Age (years)			
<25	3554	2.7	(2.2–3.3)*
25–34	3732	2.1	(1.6–2.5)*
35–44	3294	1.4	(1.0–1.8)
45–54	3023	1.3	(0.9–1.7)
55–64	2680	0.9	(0.5–1.3)
65+	3677	0.8	(0.5–1.1)
Gender			
Female	10,372	1.5	(1.2–1.7)
Male	9589	1.7	(1.4–1.9)

	No-VBS (n = 19,648)	VBS (n = 313)	Crude OR (95% C.I.)
Sleepwalking	1.1	9.9	9.6 (6.5–14.3)*
Sleep terrors	2.2	16.9	9.1 (6.7–12.4)*
Confusional arousals	3.7	17.3	5.5 (4.2–7.2)*
Nightmares	6.2	25.9	5.7 (4.1–6.8)*
Hypnagogic hallucinations	24.6	55.0	3.7 (3.0–4.7)*
Hypnopompic hallucinations	7.1	15.1	2.3 (1.7–3.2)*
Sleep paralysis	2.6	7.0	2.7 (1.8–4.3)*
Number of REM parasomnia[a]			
0	67.4	31.6	1.0
1	25.6	39.3	3.3 (2.5–4.3)*
2 or more	7.0	29.1	8.8 (6.6–11.8)*

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Polysomnographic Diagnosis of Idiopathic REM Sleep Behavior Disorder

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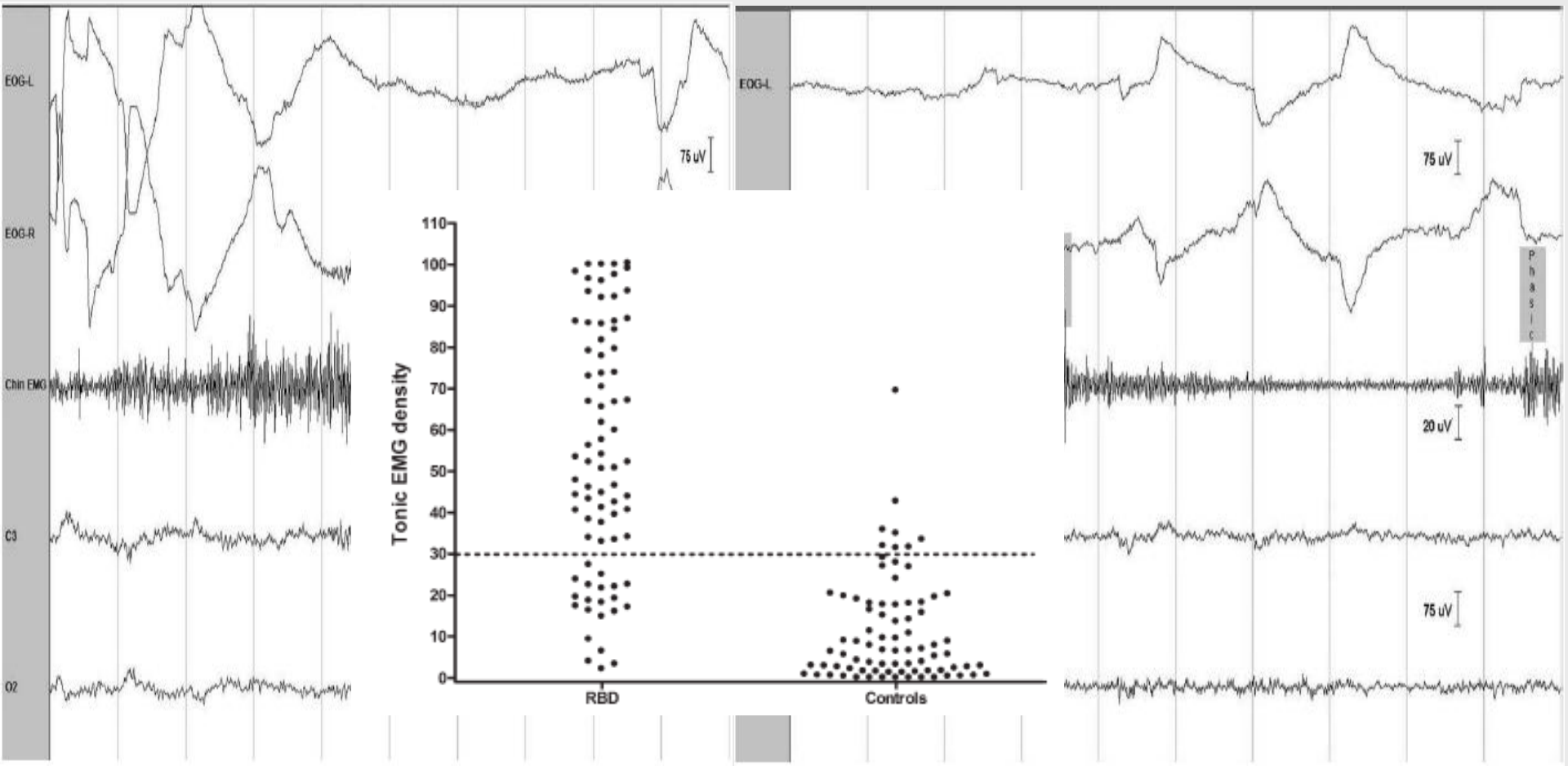

Severity of REM atonia loss in idiopathic REM sleep behavior disorder predicts Parkinson disease

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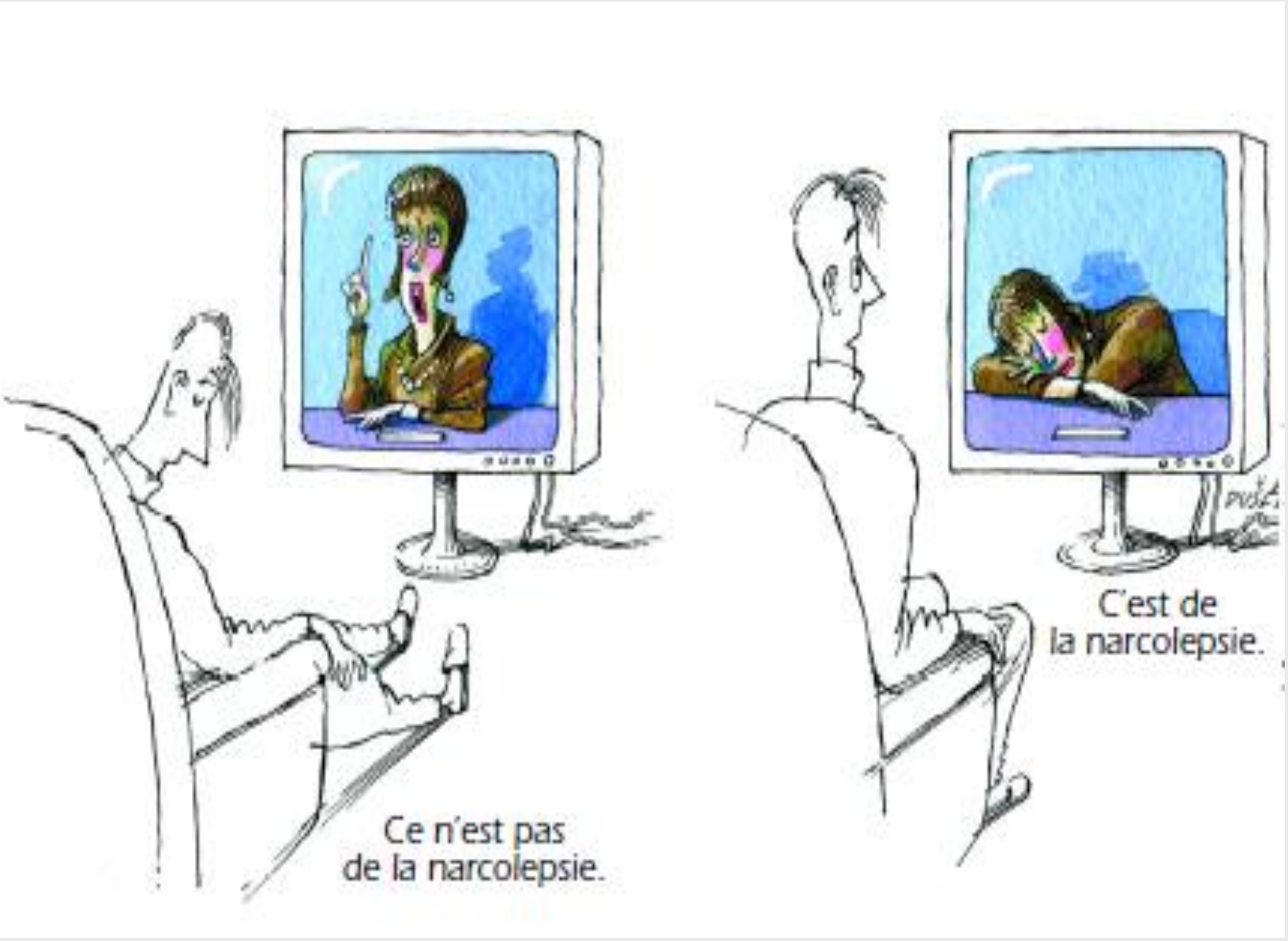
J.F. Gagnon, PhD
S. Rompré
J.Y. Montplaisir, MD, PhD

ABSTRACT

Background: Over 50% of persons with idiopathic REM sleep behavior disorder (RBD) will develop Parkinson disease (PD) or dementia. At present, there is no way to predict who will develop disease. Since polysomnography is performed in all patients with idiopathic RBD at diagnosis, there is an opportunity to analyze if baseline sleep variables predict eventual neurodegenerative disease.

	Controls (n = 26)	All RBD combined (n = 52)	p	Developed disease (n = 26)	Remained disease-free (n = 26)	p
Age at PSG, y	68.9 ± 1.6	68.1 ± 1.1	0.75	69.5 ± 1.5	66.7 ± 1.4	0.20
Sex, M/F	21/5	42/10	1.0	21/5	21/5	1.0
Interval of symptoms to PSG, y	N/A	6.3 ± 1.2	N/A	5.5 ± 0.85	7.0 ± 2.1	0.51
Duration of RBD at last evaluation (from PSG)	N/A	6.4 ± 0.53	N/A	6.7 ± 0.81	6.2 ± 0.71	0.42
Sleep latency, min	16.1 ± 2.5	26.5 ± 4.3	0.067	32.3 ± 8.0	20.9 ± 3.1	0.59
Total sleep time, min	368.5 ± 11.7	367.9 ± 12.8	0.40	354.9 ± 18.3	380.7 ± 17.9	0.23[a]
Sleep efficiency, %	79.2 ± 2.2	78.8 ± 2.2	0.54	77.6 ± 2.9	80.0 ± 3.4	0.51
Stage 1 %	14.3 ± 1.5	14.7 ± 1.6	0.66	16.8 ± 2.0	12.6 ± 2.5	0.034
Stage 2 %	60.3 ± 1.8	60.1 ± 1.4	0.83	59.3 ± 1.7	60.9 ± 2.2	0.29
Slow wave % (stages 3 + 4)	7.3 ± 1.3	7.1 ± 0.91	0.92	7.7 ± 1.3	6.6 ± 1.3	0.52
REM %	18.1 ± 0.83	18.1 ± 1.2	0.55	16.2 ± 1.4	19.9 ± 1.8	0.30
Phasic REM electromyographic density, %	5.5 ± 0.62	31.6 ± 2.3	<0.001[a]	32.2 ± 3.9	31.1 ± 2.7	0.97
Tonic REM, %	7.5 ± 1.8	51.9 ± 4.5	<0.001[a]	62.7 ± 6.0	41.0 ± 6.0	0.020[a]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de la narcolepsie.
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la narcolepsie.

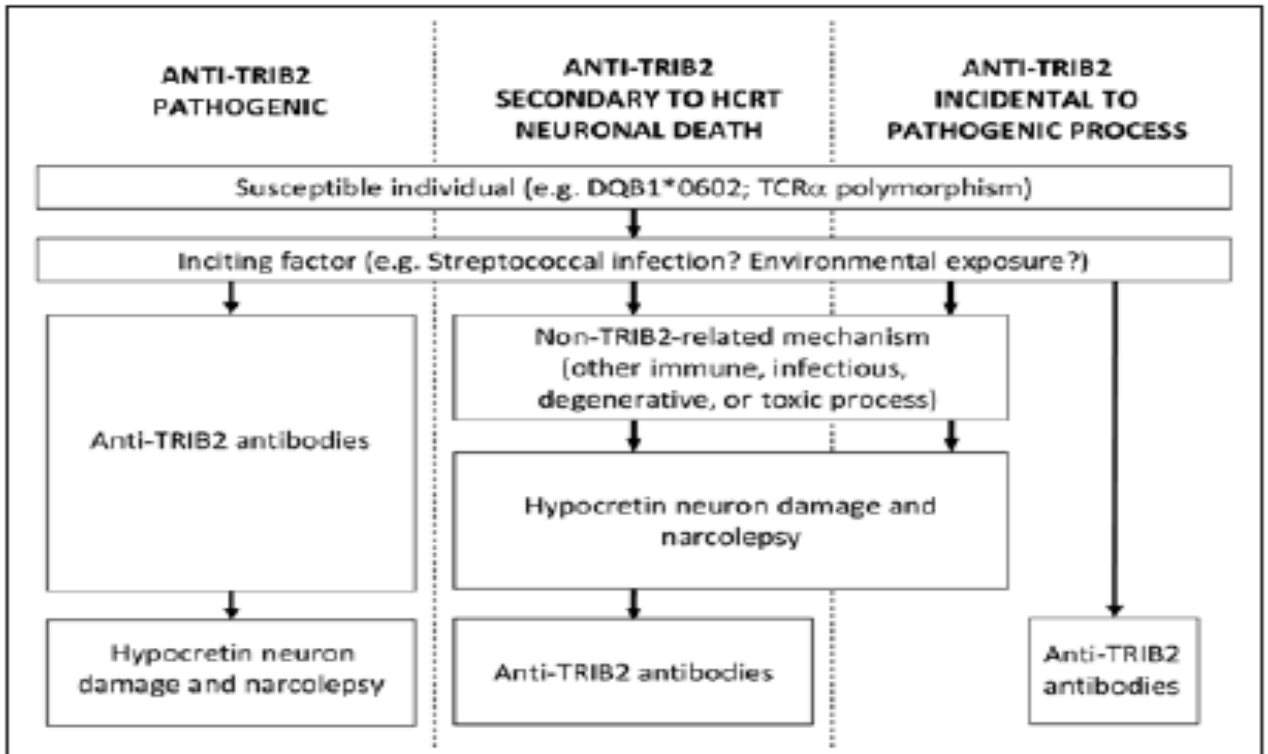

Figure 1—Three possible models of the role of anti-TRIB2 antibodies in narcolepsy.

Lim and Scammell Sleep 2010