Monatsfortbildung 14.6.2017

Posttraumatische Kopfschmerzen

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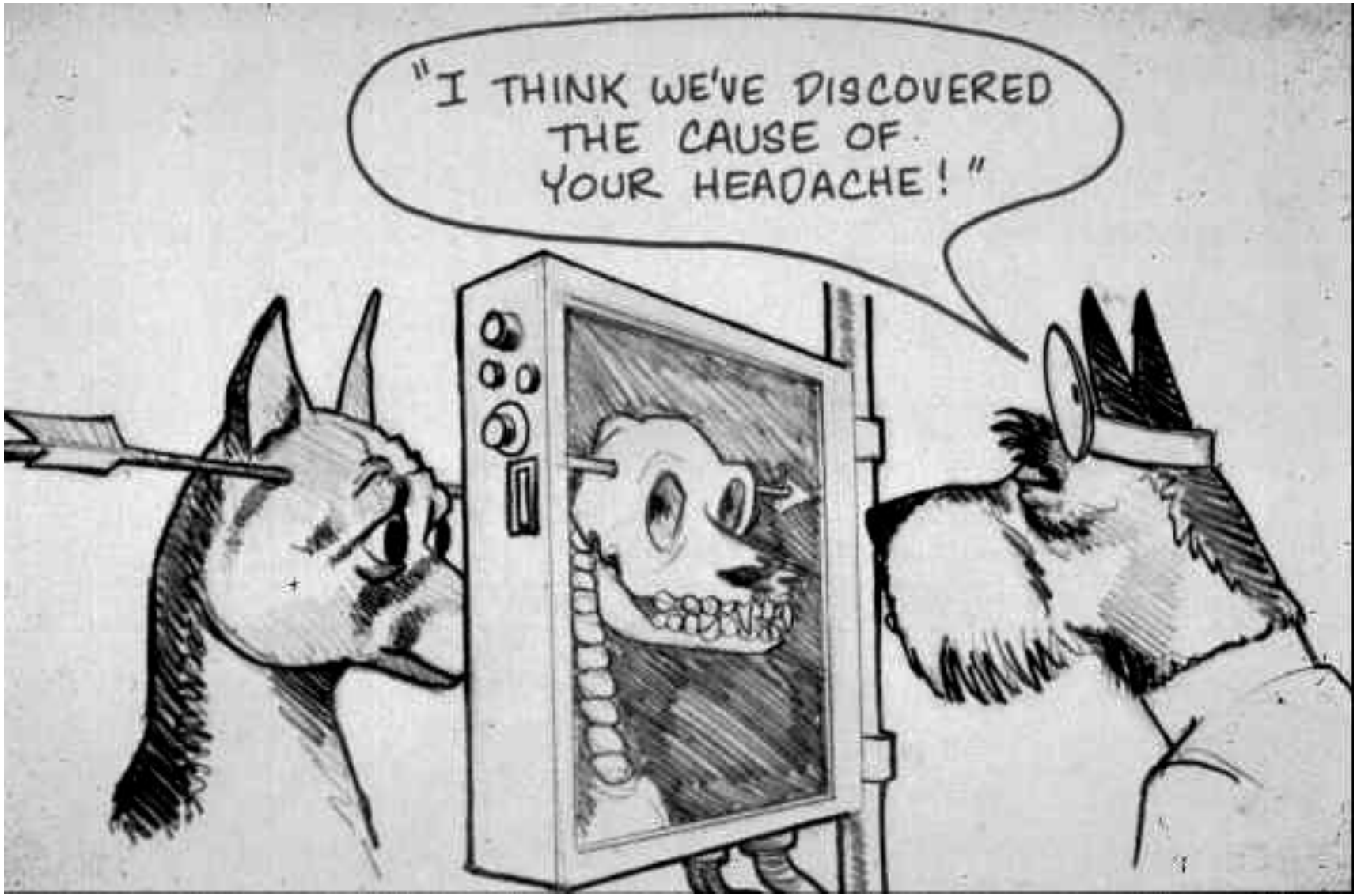
KEEP
CALM
AND
LOVE
ASIM

Kausalität im Hundemodell



P. Sandor

INTERNATIONAL CLASSIFICATION
of
HEADACHE DISORDERS

3rd edition (beta version)

(ICHD-3 beta)

ICHD-3 beta. *Cephalalgia* 2013; **33**: 629–808

Classification

Part 1:

Primary headache disorders

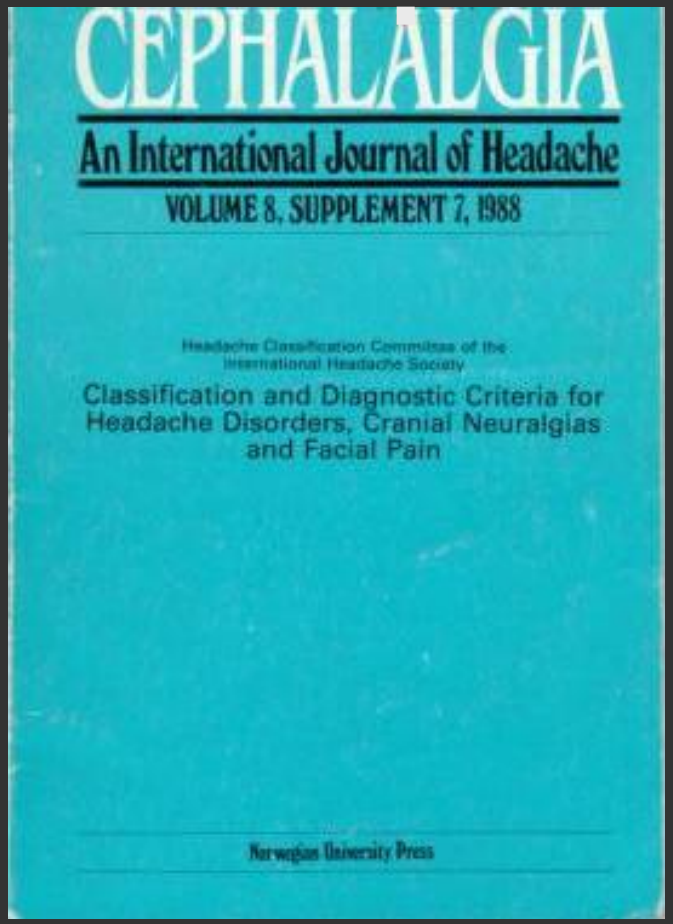
Part 2:

Secondary headache disorders

Part 3:

Painful cranial neuropathies and other facial pains

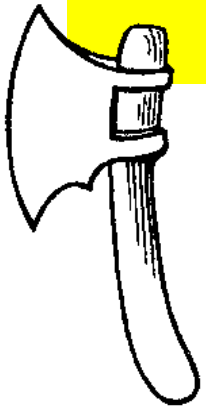
International Headache Society



Classification
and
Diagnostic Criteria
for
Headache Disorders,
Cranial Neuralgias
and
Facial Pain
1st edition 1988
2nd edition 2004

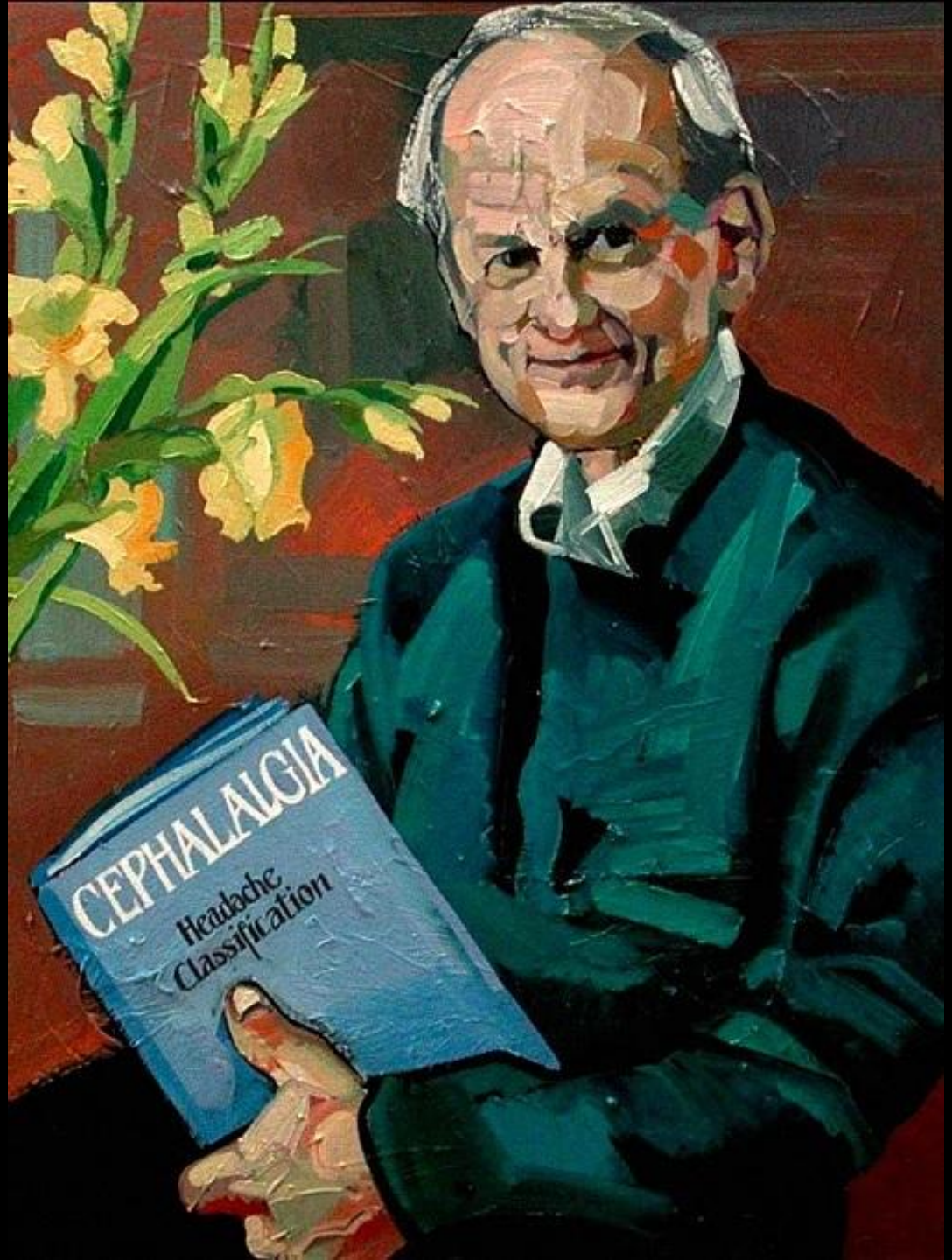
NORWAY
FINLAND
SWEDEN
RUSSIA
ESTONIA
LATVIA
LITHUANIA
BELARUS
North Sea
DENMARK
IRELAND
KINGDOM
NETHERLANDS
GERMANY
POLAND
UKRAINE
BELGIUM
CZECH REPUBLIC
SLOVAKIA
FRANCE
AUSTRIA
HUNGARY
ROMANIA
Bay of Biscay
SPAIN
ITALY
Serbia
BULGARIA
GREECE
Mediterranean Sea
MOROCCO
ALGERIA
TURKEY

Splitting



Splitting

Jes Olesen „Classifex Maximus“


CEPHALALGIA
Headache
Classification

Gibt es die posttraumatische Migräne?

- Frage, die durch rein logische Überlegungen im klassifikatorischen Kontext beantwortbar ist.
- Cave: primäre vs sekundäre Kopfschmerzen?
- Wie wäre die Diagnose einer „posttraumatischen Migräne“ im Rahmen der Klassifikation korrekt?

Wie wäre die Diagnose einer „posttraumatischen Migräne“ im Rahmen der Klassifikation korrekt?

- St. n. Auffahrunfall am xyz
  - HWS Distorsionstrauma mit persistierenden Kopfschmerzen (ICHD-3 beta 5.4)
    - phänotypisch migräneartig
- Migräne ohne Aura (ICHD-3 beta 1.1)
  - Posttraumatisch exazerbiert

5.1 Acute headache attributed to traumatic injury to the head

A. Any headache fulfilling criteria C and D

B. Traumatic injury to the head has occurred

C. Headache is reported to have developed within 7 d after one of the following:
   1. the injury to the head
   2. regaining of consciousness following the injury
   3. discontinuation of medication(s) that impair ability to sense or report headache following the injury

D. Either of the following:
   1. headache has resolved within 3 mo after the injury
   2. headache has not resolved but 3 mo have not yet passed

E. Not better accounted for by another ICHD-3 diagnosis

5. Headache attributed to head and/or neck trauma

5.1 Acute headache attributed to traumatic injury to the head

> 3 months

5.2 Persistent headache attributed to traumatic injury to the head

5.3 Acute headache attributed to whiplash

5.4 Persistent headache attributed to whiplash

5.5 Acute headache attributed to craniotomy

5.6 Persistent headache attributed to craniotomy

5.1 Persistent headache attributed to traumatic injury to the head

A. Any headache fulfilling criteria C and D
B. Traumatic injury to the head has occurred
C. Headache is reported to have developed within 7 d after one of the following:
   1. the injury to the head
   2. regaining of consciousness following the injury
   3. discontinuation of medication(s) that impair ability to sense or report headache following the injury
D. Headache persists for >3 mo after injury to the head
E. Not better accounted for by another ICHD-3 diagnosis

Der akute posttraumatische Kopfschmerz ist im gutachterlichen Kontext nur selten ein Problem

- Causation is established by onset in close temporal relation to trauma, whilst it is well recognised that headache after trauma often persists

Notes from ICHD-II

5.3 Acute headache attributed to whiplash

A. Any headache fulfilling criteria C and D
B. Whiplash, associated at the time with neck pain and/or headache, has occurred
C. Headache has developed within 7 d after whiplash
D. Either of the following:
   1. headache has resolved within 3 mo after whiplash
   2. headache has not resolved but 3 mo have not yet passed
E. Not better accounted for by another ICHD-3 diagnosis

5.3 Persistent headache attributed to whiplash

A. Any headache fulfilling criteria C and D
B. Whiplash, associated at the time with neck pain and/or headache, has occurred
C. Headache has developed within 7 d after whiplash
D. Headache persists for >3 mo after whiplash
E. Not better accounted for by another ICHD-3 diagnosis

Wichtig…

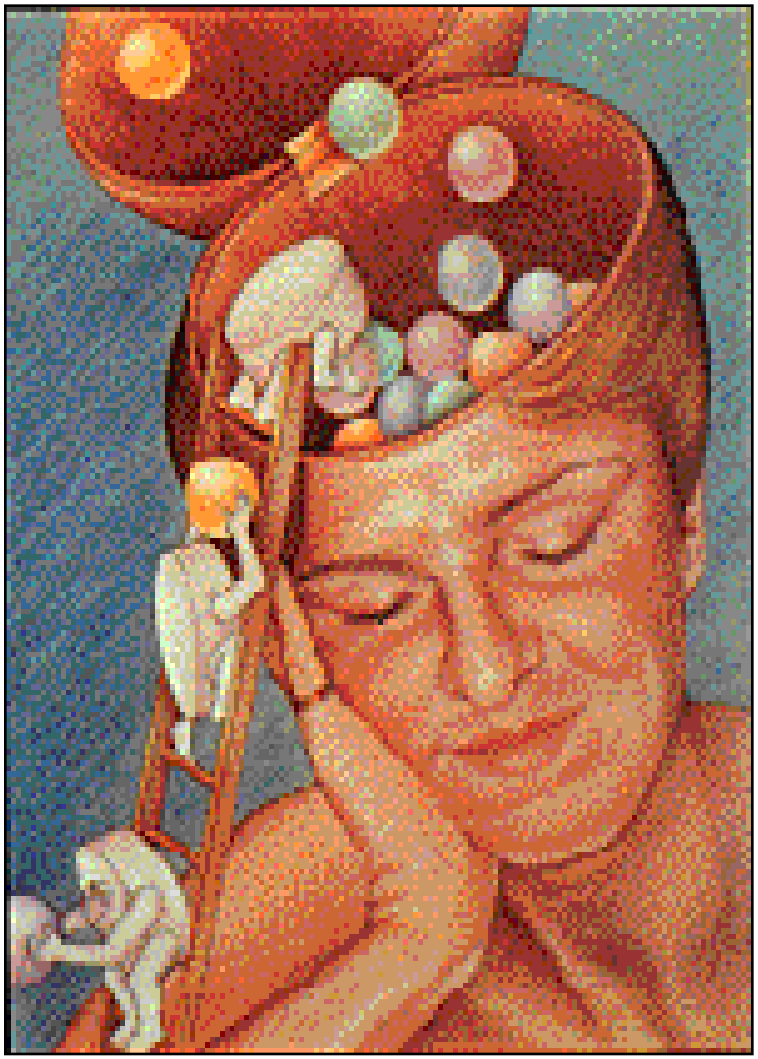
- **n.b.: die Definition des posttraumatischen Kopfwehs erfolgt über die Zuordnung von Kausalität durch zeitliche Assoziation**
- **Eine Definition des Phänotyps ist nicht Bestandteil der Kriterien**
- **Grenzfälle und mittelbare Kausalitäten bleiben problematisch**

Ein wesentlicher Zusatzfaktor…

Vignette Kopfwehsprechstunde

- 28-j Patient mit Dauerkopfschmerzen seit einem Jahr, begonnen direkt nach einem Auffahrunfall mit 30 km/h Geschwindigkeitsdifferenz
- Phänotypisch „spannungstypartig mit migränösen Exzarbationen“, selten vor Unfall Migräne
- Seit Unfall täglich 3 Tbl. Mefenaminsäure 500mg, mit ordentlichem Nutzen
- Diagnose, Abklärungen notwendig? Therapie?

Primäre Kopfschmerzen



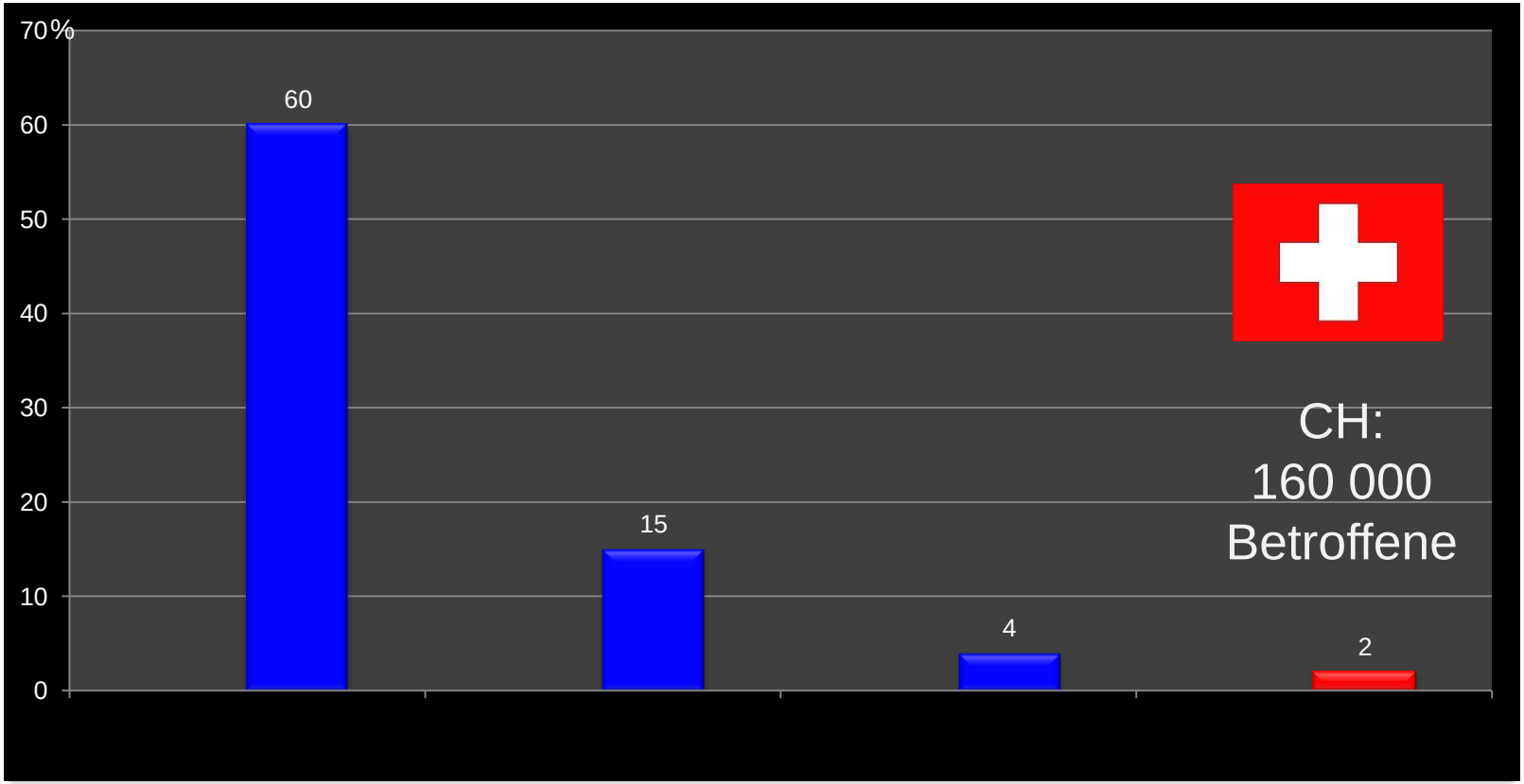
8.2 Medication-overuse headache (MOH)

A. Headache occurring on ≥15 d/mo in a patient with a pre-existing headache disorder
B. Regular overuse for >3 mo of one or more drugs that can be taken for acute and/or symptomatic treatment of headache
C. Not better accounted for by another ICHD-3 diagnosis

8.2 Medication-overuse headache (MOH)

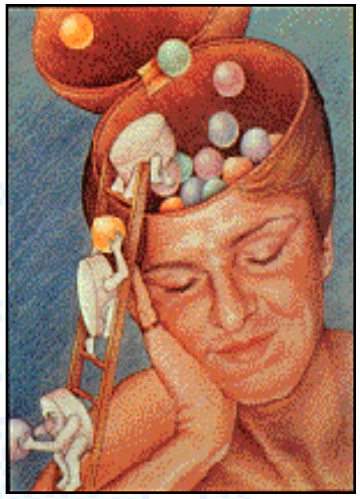
8.2.1 Ergotamine-overuse headache
8.2.2 Triptan-overuse headache
8.2.3 Simple analgesic-overuse headache
8.2.4 Opioid-overuse headache
8.2.5 Combination -analgesic-overuse headache
8.2.6 MOH attributed to multiple drug classes not individually overused
8.2.7 MOH headache attributed to unverified overuse of multiple drug classes
8.2.8 MOH attributed to other medication

Headache prevalence in Europa (%)



Stovner & Andree, J Headache Pain 2010

5.1 Persistent headache attributed to traumatic injury to the head



Headache persists for >3 mo after head trauma

8.2 Medication-overuse headache (MOH)

5.1 Persistent headache attributed to traumatic injury to the head

8.2 Medication-overuse headache

Notes from ICHD-II

- The most common cause of migraine-like or mixed migraine-like and TTH-like headaches on ≥15 d/mo is overuse of symptomatic migraine drugs and/or analgesics

- Patients with migraine or TTH who develop new headache or whose migraine or TTH is made markedly worse during medication overuse should be coded for that headache + 8.2 *Medication-overuse headache*

- Diagnosis of MOH is important because patients rarely respond to preventative medications until withdrawn

MOH and psychiatric comorbidity

Table 1 Relative risk of suffering from psychiatric disorders for migraine (MIG) compared with medication overuse headache (MOH) (odds ratios and confidence intervals)

	MOH (*n*, %)	MIG (*n*, %)	OR	95% CI	*P*
Major depressive episode	16 (39)	1 (2.4)	21.8	(2.7, 177.5)	0.004
All mood disorder	35 (85.4)	21 (51)	4.5	(1.5, 13.5)	0.007
Generalized anxiety disorder	17 (41.5)	4 (9.8)	6	(1.74, 20.9)	0.004
Panic disorder	10 (24.4)	1 (2.4)	12.1	(1.4, 104.4)	0.02
Social phobia	14 (34.1)	5 (12.2)	4.3	(1.3, 14.5)	0.02
All anxiety disorders	34 (82.9)	22 (53.7)	3.5	(1.2, 10.1)	0.02
All substance-related disorders	18 (43.9)	6 (14.6)	7.6	(2.2, 26)	0.001

Radat et al. Cephalalgia 2005

Medication-overuse headache: similarities with drug addiction

Paolo Calabresi[1] and Letizia Maria Cupini[2]

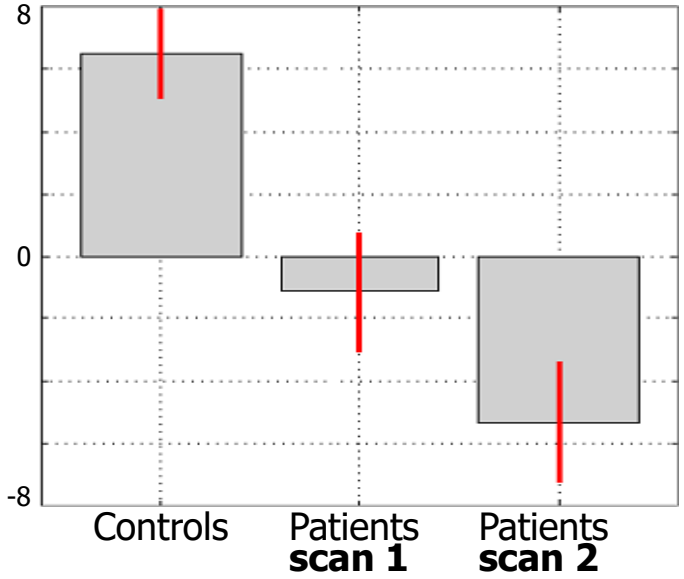
TRENDS in Pharmacological Sciences Vol.26 No.2 February 2005

Orbitofrontal cortex involvement in chronic analgesic-overuse headache evolving from episodic migraine

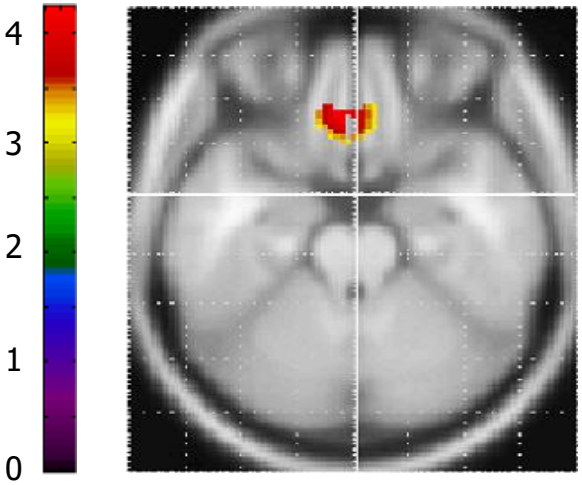
Arnaud Fumal,[1,2,†] Steven Laureys,[1,3,†] Laura Di Clemente,[1] Mélanie Boly,[1,3] Valentin Bohotin,[1] Michel Vandenheede,[1] Gianluca Coppola,[1] Eric Salmon,[1,3] Ron Kupers[4] and Jean Schoenen[1,2]

Hypometabolic before, more so after withdrawal

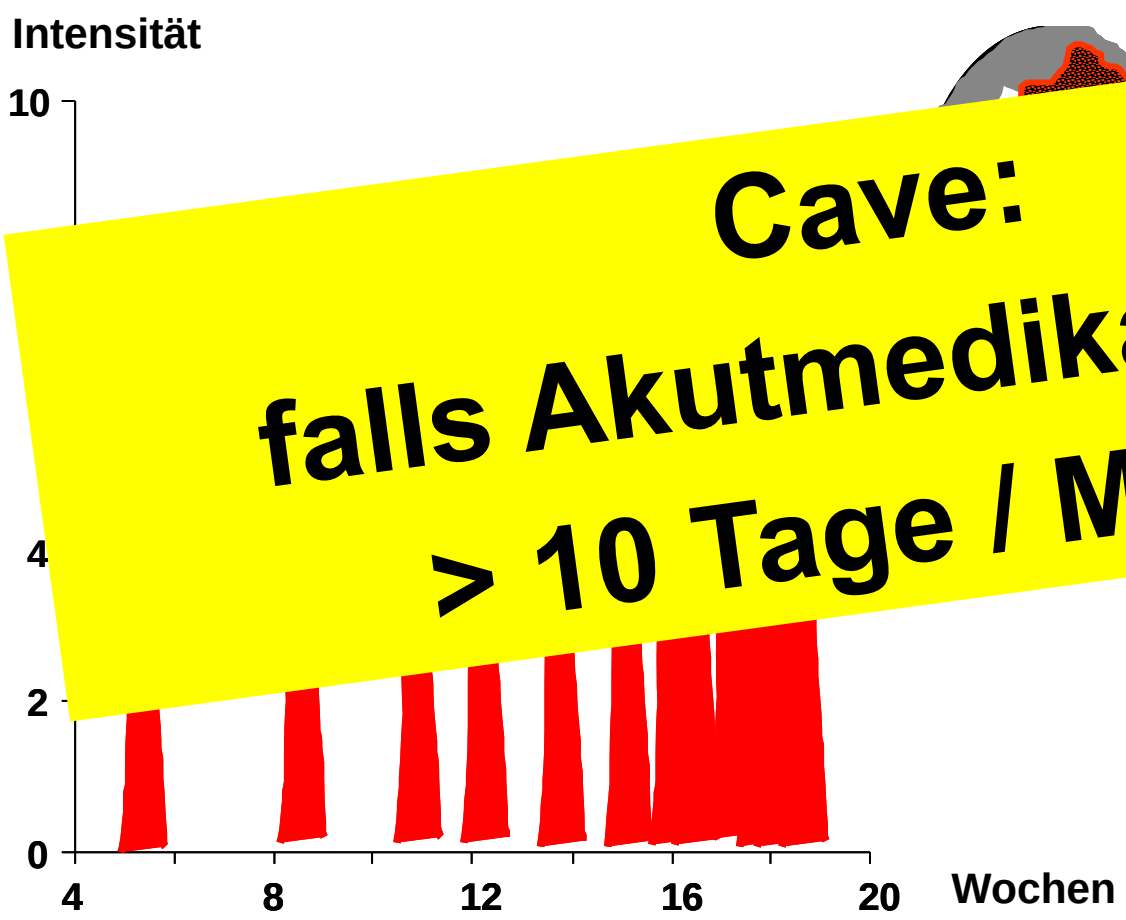
Orbitofrontal cortex



T value



Episodische Migräne & Schmerzmittelübergebrauch



Cave:
falls Akutmedikamente
> 10 Tage / Monat

Zurzacher Kopfschmerz-Programm Evidenzbasierte Bausteine

- Medikamentöse Prophylaxe des primären Kopfschmerzes
- Aerobes Ausdauertraining
- Psychologische Edukation / Coaching (Triggervermeidung)
- Physiotherapie
- Medizinische Massage
- Entspannungstherapien (z.B. Jacobson)
- TCM (Akupunktur)

Neurowissenschaftliches Programm

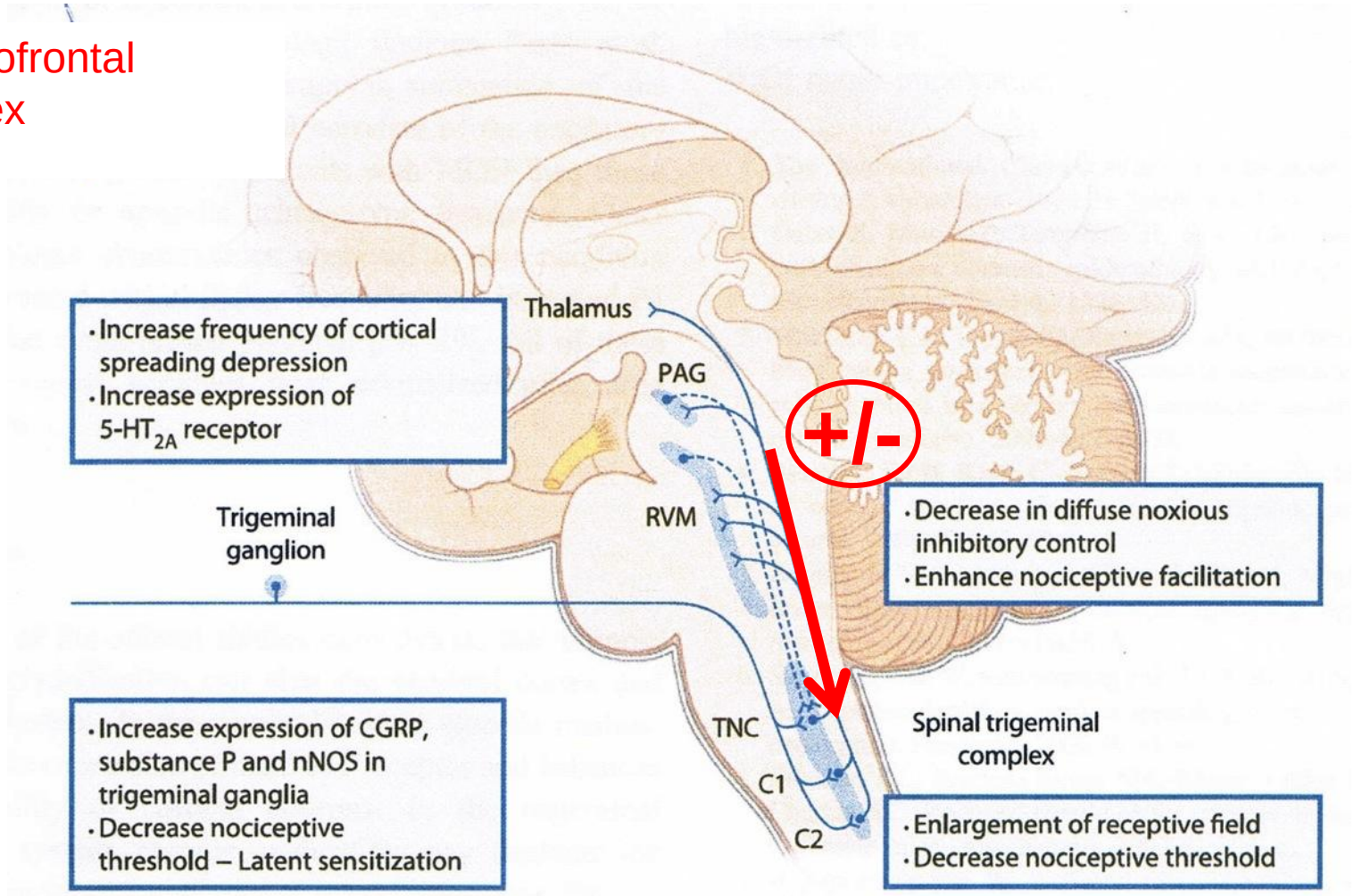
- **Riederer F, Marti M, Luechinger R, Lanzenberger R, von Meyenburg J, Gantenbein AR, Pirrotta R, Gaul C, Kollias S,** Sándor PS**.**
  Grey matter changes associated with medication-overuse headache: correlations with disease related disability and anxiety.
  World J Biol Psychiatry. 2012 Oct;13(7):517-25.

- **Riederer F, Gantenbein AR, Marti M, Luechinger R, Kollias S,** Sándor PS**.**
  Decrease of gray matter volume in the midbrain is associated with treatment response in medication-overuse headache: possible influence of orbitofrontal cortex.
  J Neurosci. 2013 Sep 25;33(39):15343-9.

- **Riederer F, Schaer M, Gantenbein AR, Luechinger R, Michels L, Kaya M, Kollias S,** Sándor PS**.**
  Cortical Alterations in Medication-Overuse Headache.
  Headache. 2016 Dec 28. doi: 10.1111/head.12993.

- **Michels L, Christidi F, Steiger VR,** Sándor PS**, Gantenbein AR, Landmann G, Schreglmann SR, Kollias S, Riederer F. Pain modulation is affected differently in medication-overuse headache and chronic myofascial pain - A multimodal MRI study.**
  Cephalalgia. 2016 Jun 1. pii: 0333102416652625.

Pathophysiological concepts



Nach: Bongsebandhu-Phubhakdi & Srikiatkhachorn Curr Pain Headache Rep. 2012

Therapieempfehlungen Schweizerische Kopfwehgesellschaft

9. Revidierte Auflage 2014

www.headache.ch

Arbeitsfähigkeit…

- Kopfwehzeit anteilsmässig an der Gesamtarbeitszeit
- Zusätzlicher Prozentsatz für die Unvorhersehbarkeit des Kopfweh, falls episodisch oder exazerbierend
- Mitzuberücksichtigen:
  - Beeinträchtigung durch Kopfweh
  - Kontext (Übersetzungsarbeiten am Computer vs Servicetätigkeit)

Wichtig…

- 3 Monate; akut vs chronisch (wie immer…)
- Identifizieren Sie MOH und behandeln Sie es
- CAVE: posttraumatische Kopfschmerzen und Medikamentenübergebrauchskopfschmerzen können sich unter unterschiedlichen „Masken“ verstecken…verschiedene Phänotypen haben.

Cephalalgia
An International Journal of Headache
International Headache Society

LETTER TO THE EDITOR

Posttraumatic headache—IHS Chapter 5

Rita Schaumann-von Stosch[1], Holger Schmidt[1] and Peter Sandor[2]
[1]Insurance Medicine—Neurology, SUVA (Swiss National Accident Foundation), CH 6002 Lucerne e-mail rita.schaumann@suva.ch, and [2]Headache and Pain Unit, Neurology Department, University Hospital Zurich, Switzerland

Cephalalgia. 2008 Jun 16.

Important points

- Acute post-traumatic headache in 80% of cases (Lenaerts and Couch, 2004)
- Inverse relation between
  - the development of headache
  - the severity of the head trauma

  (Wilkinson & Gilchrist, 1980; Yamaguchi, 1992; Couch & Bearss, 2001)

Suggestions

Early consultation with specialist (e.g. neurologist)

- To prevent medication overuse headache…
- … or treat it, in a stratified way…
- … to enable efficacious prophylactic therapy

(Zeeberg 2006)

→ MORE RESEARCH ON THE TOPIC NEEDED !!!

Response to letter

„Classifex maximus“

It is quite possible that it is the medication overuse from the onset of the acute post-traumatic headache that is responsible for the continuation of headache into the chronic phase. I agree that criteria should be changed to exclude patients with medication overuse. It should be made widely known in publications in general medical journals that patients must not remain on daily analgesic treatment after head trauma for more than a few weeks.

Professor Jes Olsesen, Department of Neurology, University Hospital, Glostrup Hospital, Copenhagen 2600, Denmark. E-mail jeol@glo.regionh.dk

Take home…

- ICHD-3 beta; Diagnosekriterien der Internationalen Kopfschmerzgesellschaft (www.i-h-s.org)
- N.b.: Unterscheidung primäre vs sekundäre Kopfschmerzen = >
  - Zeitliche Assoziation determiniert GA-Kausalität
  - Phänotyp bei posttraumatischem Kopfweh nicht festgelegt
- Medikamentenübergebrauchskopfschmerzen
  - **Identifizieren !!!**
  - **Behandeln !!!**


Danke