



Update IASP Schmerzdiagnosen: Nozizeptiver, neuropathischer und noziplatischer Schmerz

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Conflicts of interest

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NoChro, Modelling Pain Switches, NoPain, ERA-NET (IM-PAIN)

Consultant / Speaker:

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Agenda 1

Definition: nociceptive pain

Pain that arises from actual or threatened
damage to non-neural tissue
and is due to the
activation of nociceptors

Definition: Nozizeptiver Schmerz

Pain that arises from actual or threatened damage to non-neural tissue and is due to the activation of nociceptors.

Note: This term is designed to contrast with neuropathic pain. The term is used to describe pain occurring with a

normally functioning somatosensory nervous system

to contrast with the abnormal function seen in neuropathic pain

Agenda 2

Definition: neuropathic pain

Pain that arises as a direct consequence of a **lesion or disease** affecting the **somatosensory system**

Peripheral nervous system

Central nervous system

Definition: Neuropathischer Schmerz

Pain caused by a lesion or disease of the somatosensory nervous system.

Note: Neuropathic pain is a clinical description (and not a diagnosis) which requires a demonstrable lesion or a disease that satisfies established neurological diagnostic criteria. The term lesion is commonly used when diagnostic investigations (e.g. imaging, neurophysiology, biopsies, lab tests) reveal an abnormality or when there was obvious trauma. The term disease is commonly used when the underlying cause of the lesion is known (e.g. stroke, vasculitis, diabetes mellitus, genetic abnormality). Somatosensory refers to information about the body per se including visceral organs, rather than information about the external world (e.g., vision, hearing, or olfaction). The presence of symptoms or signs (e.g., touch-evoked pain) alone does not justify the use of the term neuropathic. Some disease entities, such as trigeminal neuralgia, are currently defined by their clinical presentation rather than by objective diagnostic testing. Other diagnoses such as postherpetic neuralgia are normally based upon the history. It is common when investigating neuropathic pain that diagnostic testing may yield inconclusive or even inconsistent data. In such instances, clinical judgment is required to reduce the totality of findings in a patient into one putative diagnosis or concise group of diagnoses.

Pain



History
History of relevant neurological lesion or disease and pain distribution neuroanatomically plausible

No

Unlikely to be neuropathic pain

Yes

Possible neuropathic pain



Examination
Pain is associated with sensory signs in the same neuroanatomically plausible distribution

Yes

Probable neuropathic pain



Confirmation
Diagnostic test confirming a lesion or disease of the somatosensory nervous system explaining the pain

Yes

Definite neuropathic pain

Symptom screening
Pain drawings

Sensory testing

Diagnostic tests

Neuropathic pain:
Diagnostic algorithm
NeuPSIG/IASP

Agenda 3

Definition: nociplastic pain?

Schmerz hervorgerufen durch eine
veränderte Nozizeption
ohne periphere Nozizeptoraktivierung oder
Nervenverletzung

Warum?

Viele klinisch gut charakterisierte Schmerzentitäten,
die nicht in die Kategorie „nozizeptiv/neuropathisch“ passen.

Neuer Begriff zur Abgrenzung von “idiopathisch/unklar“.

Spezifische Pathophysiologie wird vermutet.

Entscheidend für Klinik und Wissenschaft.

Definition: Noziplastischer Schmerz

Pain that arises from altered nociception despite

no

clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors

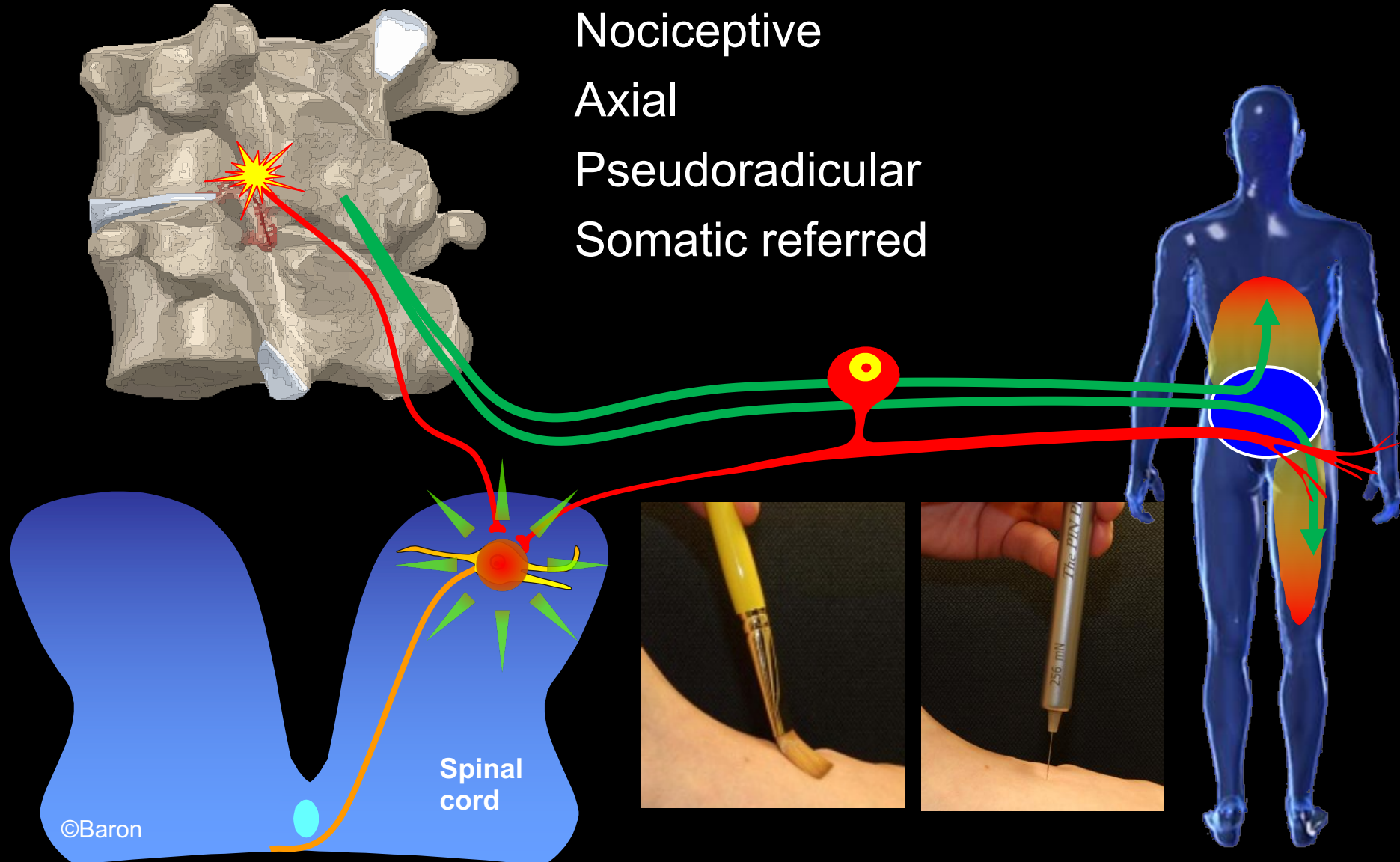
or evidence for disease or lesion of the somatosensory system causing the pain.

Fibromyalgia, CRPS I, nonspecific chronic low-back pain, irritable bowel syndrome, other “functional” visceral pain disorders

Note:

Patients can have a **combination** of nociceptive/neuropathic **and** nociplastic pain

Hyperalgesia in the skin



Noziplastischer Schmerz: Charakteristika

Pain and hypersensitivity is present in regions with apparently normal tissues and without any signs of neuropathy.

Ongoing and intense nociceptive pain is a risk factor for developing nociplastic pain.

High rates of nociplastic pain states, such as fibromyalgia, are seen in osteoarthritis, rheumatoid arthritis and other nociceptive pain disorders

Primary chronic pain (ICD-11) consists of nociplastic pain.

Different sets of clinical criteria are required for nociplastic pain **manifested in the musculoskeletal system and viscera.**

Beispiel: die Fibromyalgie ist nozioplastisch

Nozioplastische Veränderungen im **zentralen Nervensystem (zentrale Sensibilisierung)**

- Zentrale Sensibilisierung im Rückenmark, geschwächte deszendierende Kontrolle
- Desensibilisierende Medikamente wirken

Aber: keine small-fiber Polyneuropathie

Veränderte deszendierende Modulation

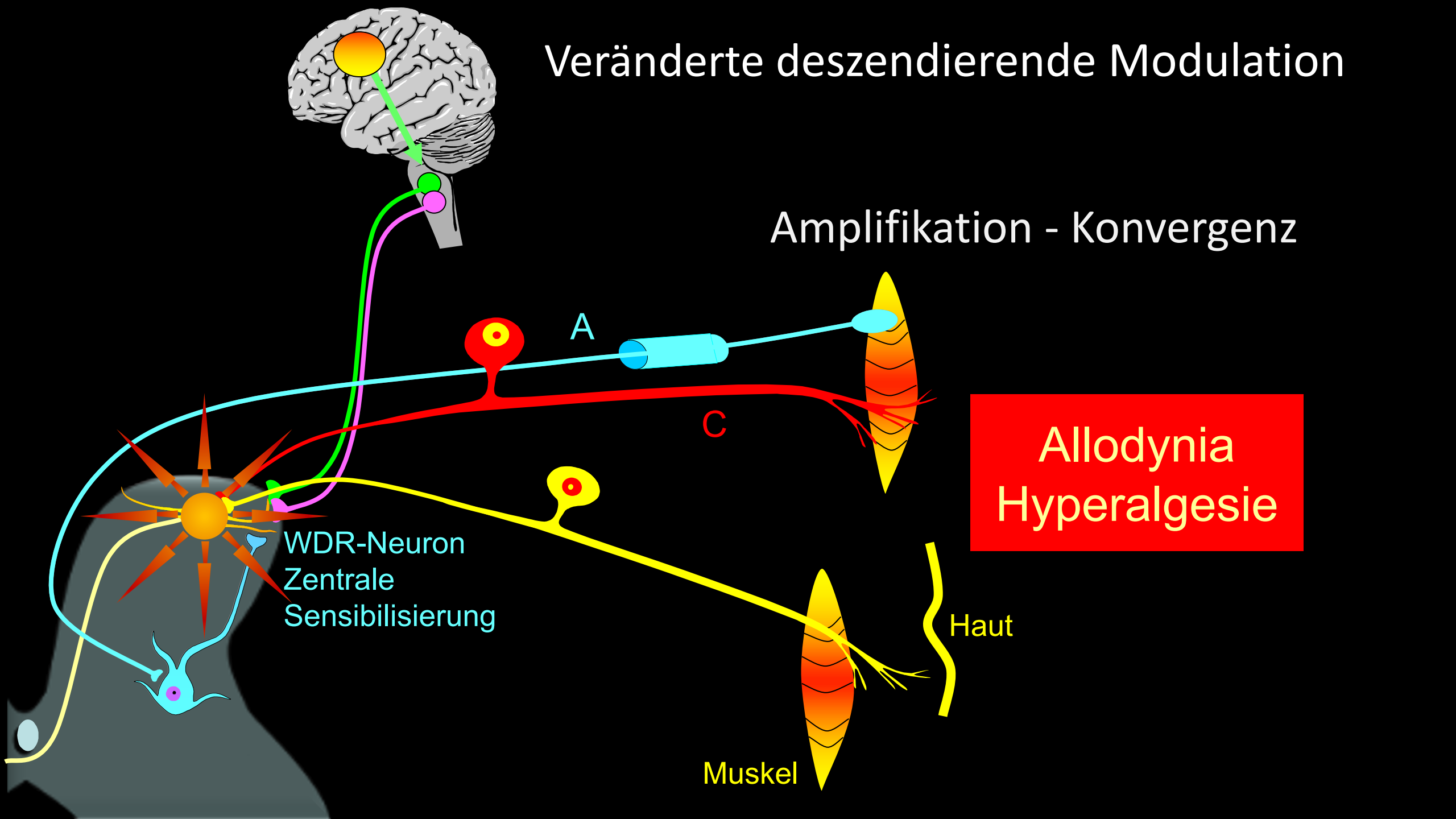
Amplifikation - Konvergenz

Allodynia
Hyperalgesie

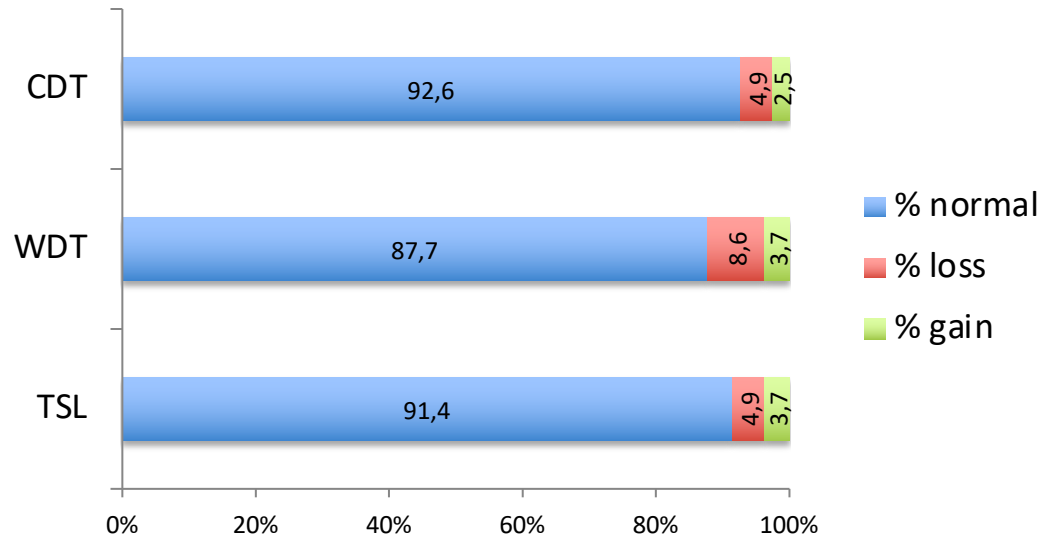
WDR-Neuron
Zentrale
Sensibilisierung

Haut

Muskel

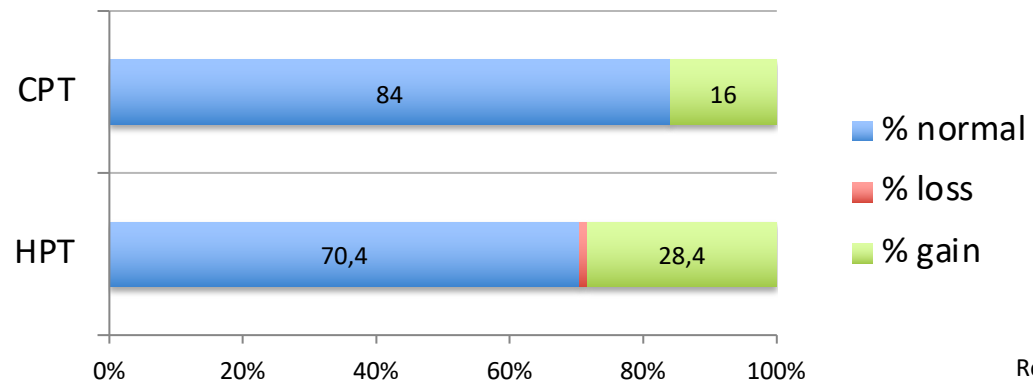


Pathological findings – thermal tests



Patients with signs of a potential “small fiber” neuropathy

only 10%



“Neuropathic pain” only in a small subgroup