

Neuropathic Pain in Oncological Patients:

Concordance between clinical evaluation and DN4 questionnaire.



Morena Shkodra, MD

**Palliative Care, Pain Therapy and Rehabilitation Unit,
Fondazione IRCCS Istituto Nazionale dei Tumori, Milano Italy**

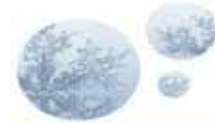


FONDAZIONE IRCCS
ISTITUTO NAZIONALE
DEI TUMORI

Sistema Sanitario  Regione
Lombardia

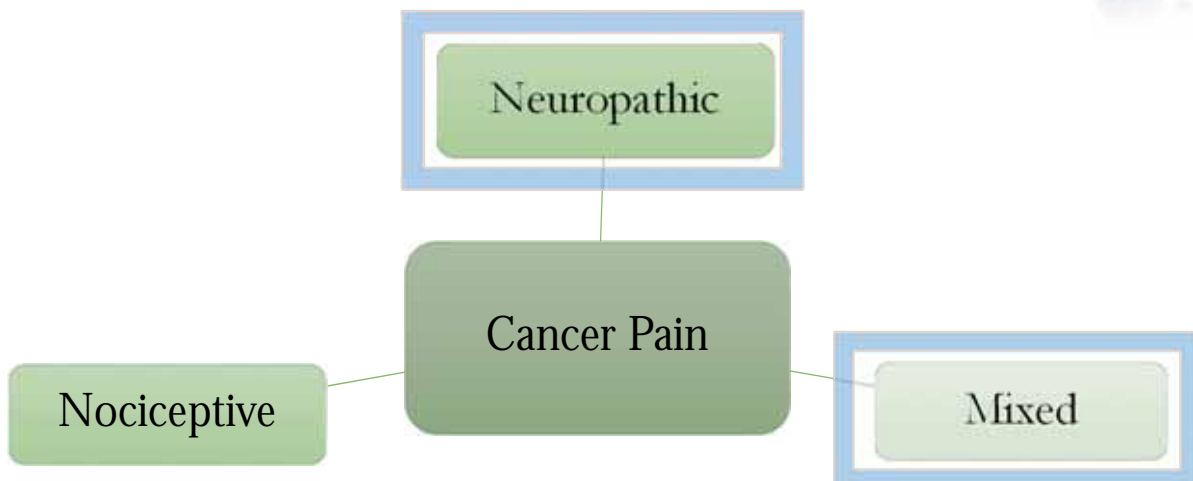


PAIN-Net



PRC European Palliative Care
Research Centre

Cancer Pain



Neuropathic Cancer Pain

Neuropathic Pain → Pain arising as a direct consequence of a damage or disease that affect the somatosensory nervous system.

Worse Response
to Treatment

Lack of a standardised
method for assessment

AIMS

Examine the concordance in diagnosis using different methods and estimate

I. DN4 Questionnaire

INTERVIEW OF THE PATIENT

Question 1: Does the pain have one or more of the following characteristics?

	Yes	No
1 – Burning		
2 – Painful cold		
3 – Electric shocks		

Question 2: Is the pain associated with one or more of the following symptoms in the same area?

	Yes	No
4 – Tingling		
5 – Pins and needles		
6 – Numbness		
7 – Itching		

EXAMINATION OF THE PATIENT

Question 3: Is the pain located in an area where the physical examination may reveal one or more of the following characteristics?

	Yes	No
8 – Hypoesthesia to touch		
9 – Hypoesthesia to prick		

Question 4: In the painful area, can the pain be caused or increased by:

	Yes	No
10 – Brushing		

METHODS



- Patients enrolled from May 2015 to June 2018 as part of a *prospective longitudinal observational study* aimed at studying the interaction between clinical and genetic factors in the modulation of analgesia and opioid side effects in cancer pain.

INCLUSION CRITERIA

Age \geq 18 years and informed consent

Pain Intensity \geq 4 (NRS) in last 24 hours

Oncological pain that requires treatment with one of the following opioids: Morphine, Oxycodone, Fentanyl and Buprenorphine

Diagnosis of a solid tumor

❖ **Analysis on clinical data obtained from the baseline visits.**

METHODS



- Presence of NcP was assessed using:
 1. DN4 Questionnaire with a cut-off of 4
 2. Clinical evaluation made by the doctor

1. **Nociceptive**
2. **Neuropathic**
3. **Mixed**

- Cohen's Kappa was calculated to estimate the concordance between DN4 and clinical evaluation.

RESULTS

- 312 enrolled patients
- Mean Age: 63 years
- 94% with metastatic disease
- 84% were already receiving opioids of the third step of WHO ladder before the study
- Mean Pain Intensity in last 24 hours : *5.4 (NRS 0-10)*
- KPS: 69

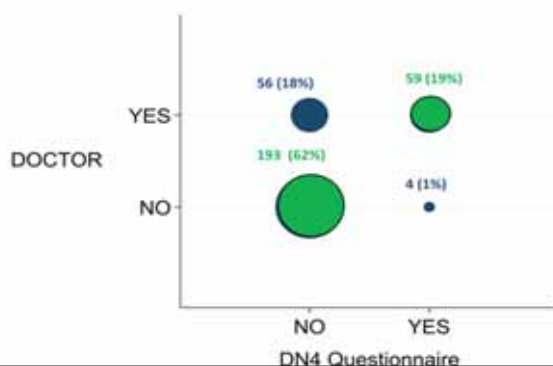
Prevalence of NcP

DN4 Questionnaire

20%

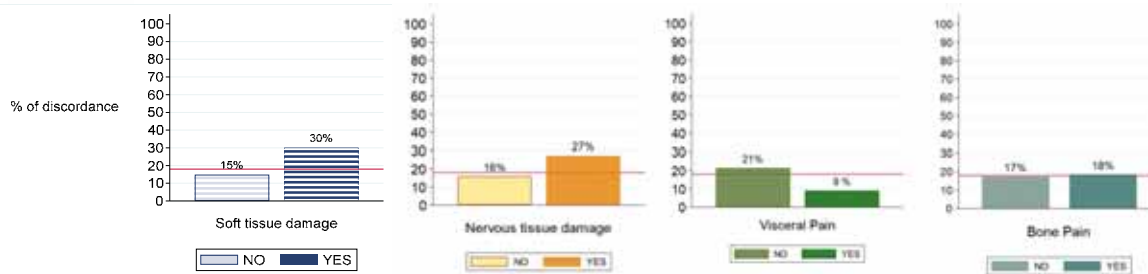
Doctor's Evaluation

37%



Cohens' Kappa = **0.54**
 → *Low concordance*

Relation between discordance (DN4 NO Doctor YES) and specific pain syndromes



CONCLUSIONS

- The prevalence of NcP obtained by the clinical evaluation is similar to that reported in literature, but we found low concordance between DN4 and clinical evaluation
- Adding a **check-list of syndromes** can help doctors in the decision-making process regarding pain type
- The development of a standardized approach in diagnosing NcP is essential for future studies and better clinical outcomes.



Thank you For the Attention!



Molecule-to-Man PAIN Network
EU RESEARCH FRAMEWORK PROGRAMME H2020 / Marie
Skłodowska-Curie Actions



Sistema Sanitario Regione Lombardia

