2018
28-30 JUNE
VIENNA, AUSTRIA

SUPPORTIVE CARE
MAKES EXCELLENT
CANCER CARE POSSIBLE

The Interventional Pain Doctor's Collaborative Role in Diagnosis, Treatment, and Triage of Head & Neck Cancer Pain Patients

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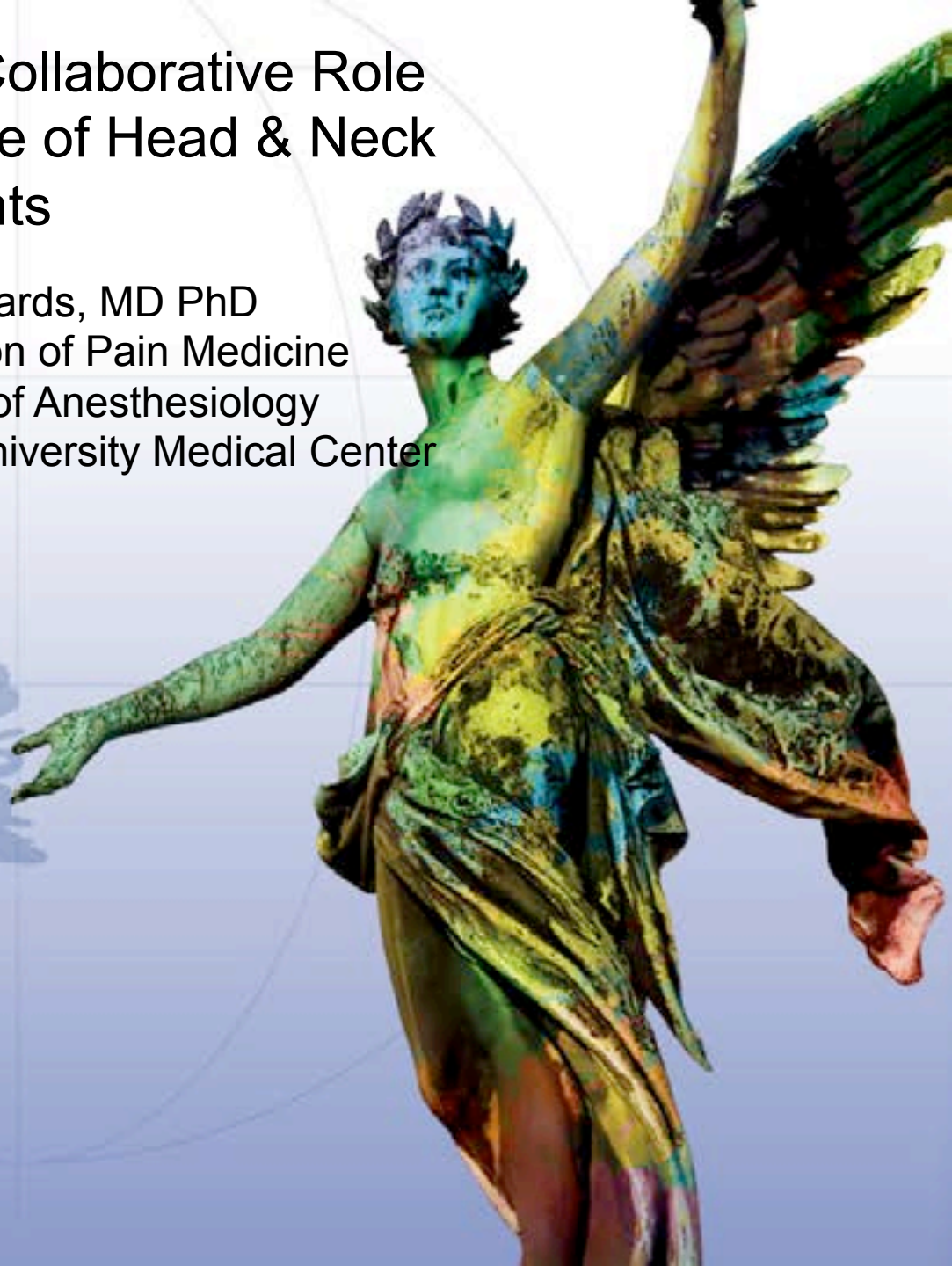
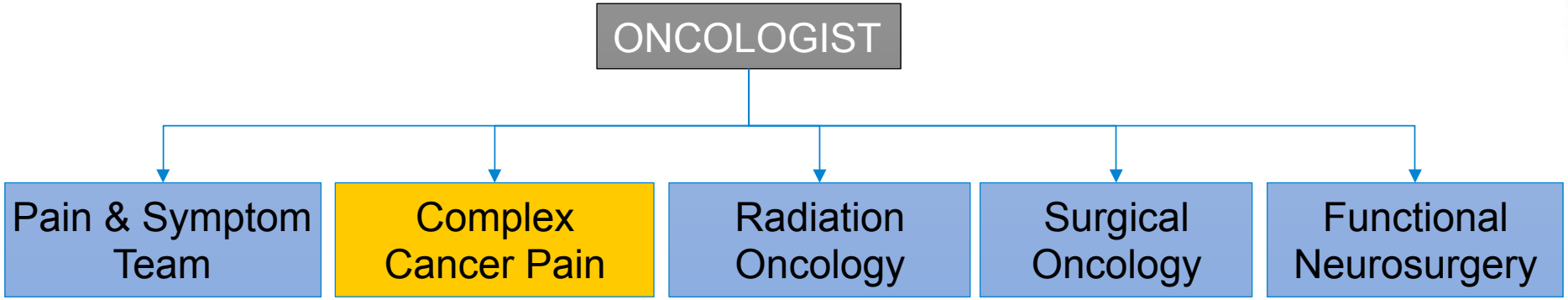


MASCC/ISOO
ANNUAL MEETING ON SUPPORTIVE CARE IN CANCER

FACULTY DISCLOSURE

- Grunenthal – research grant (CRPS Phase II trial)
- Semnur – research grant (C.L.E.A.R. trial)

COMPREHENSIVE CARE



Success Secrets

Multi-disciplinary clinic	Pain Management Physician Located in the Cancer Clinic
Multi-disciplinary meetings 1. weekly 2. monthly	Pain & Supportive Oncology weekly meeting Interventional Cancer Pain Board monthly
Easy Access 1. Nurse navigator 2. Shared number	Easy Access 1. Cancer Pain Nurse Coordinator 2. Cancer Pain Line
Protocols for care pathways	i.e. Trigeminal Neuralgia
Collegial and Collaborative	share cell #'s, support each other celebrate successful collaboration

Outline

I. Why consider other options (interventional)
II. The first next step: the goals of care
III. Example 1. Radiation fibrosis
IV. Example II. Trigeminal neuralgia
V. Example III. Cervical spondylosis
VI. Summary

I. WHY CONSIDER OTHER OPTIONS? MALIGNANCY AND PAIN

- 25 % of those newly diagnosed
- 33 % of those undergoing active treatment
- 75 % of those with advanced disease
- Chronic pain in cancer survivors post-treatment is estimated at 75 %

II. THE FIRST NEXT STEP: CONSULTATION TO PAIN SPECIALIST

1. To enable treatment

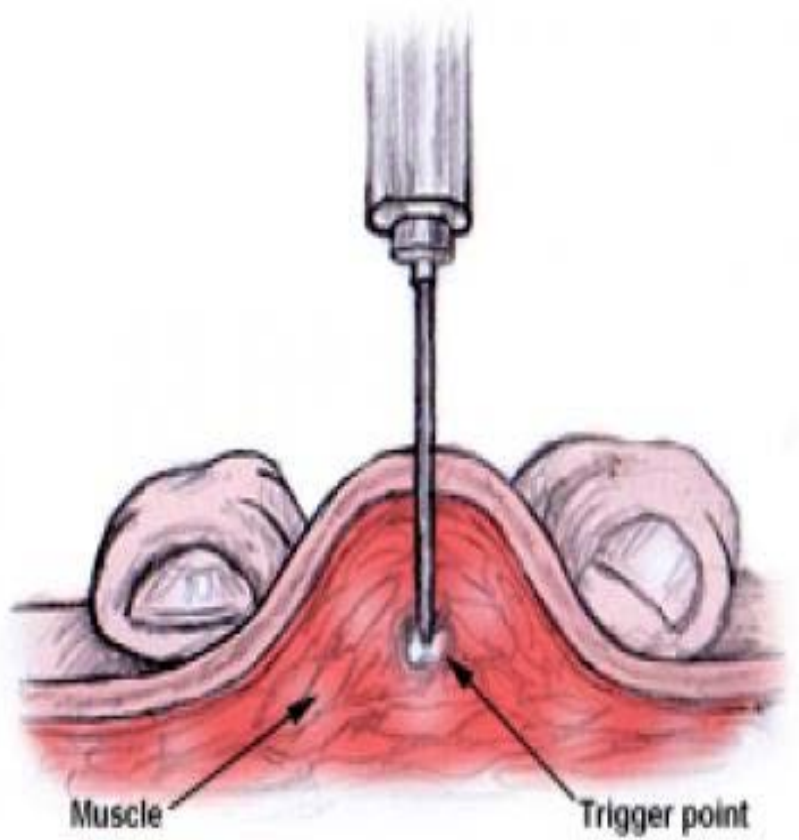
2. After treatment (NED), to improve QOL
   - painful sequelae of chemo/radtx/sx

3. Treatment is no longer an option
   - for palliative QOL goals

THE TYPES OF PAIN

Type 1. Nociceptive Pain – pain that occurs when nociceptors are activated

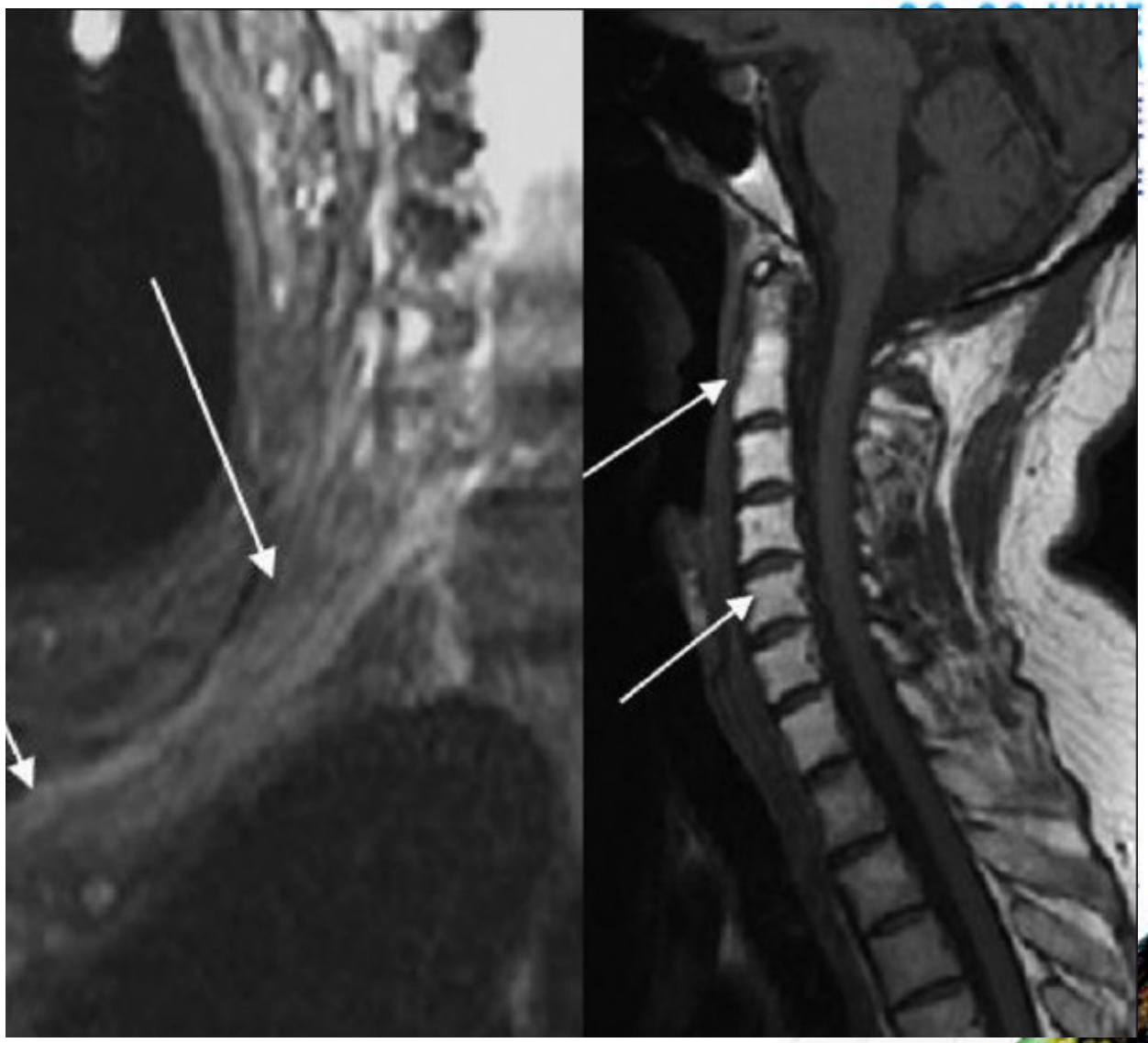
- skeletal (arthritis, postoperative mechanical)
- muscle (myofascial – fibrosis)



THE TYPES OF PAIN

Type II. Inflammatory Pain – pain that occurs due to local inflammation

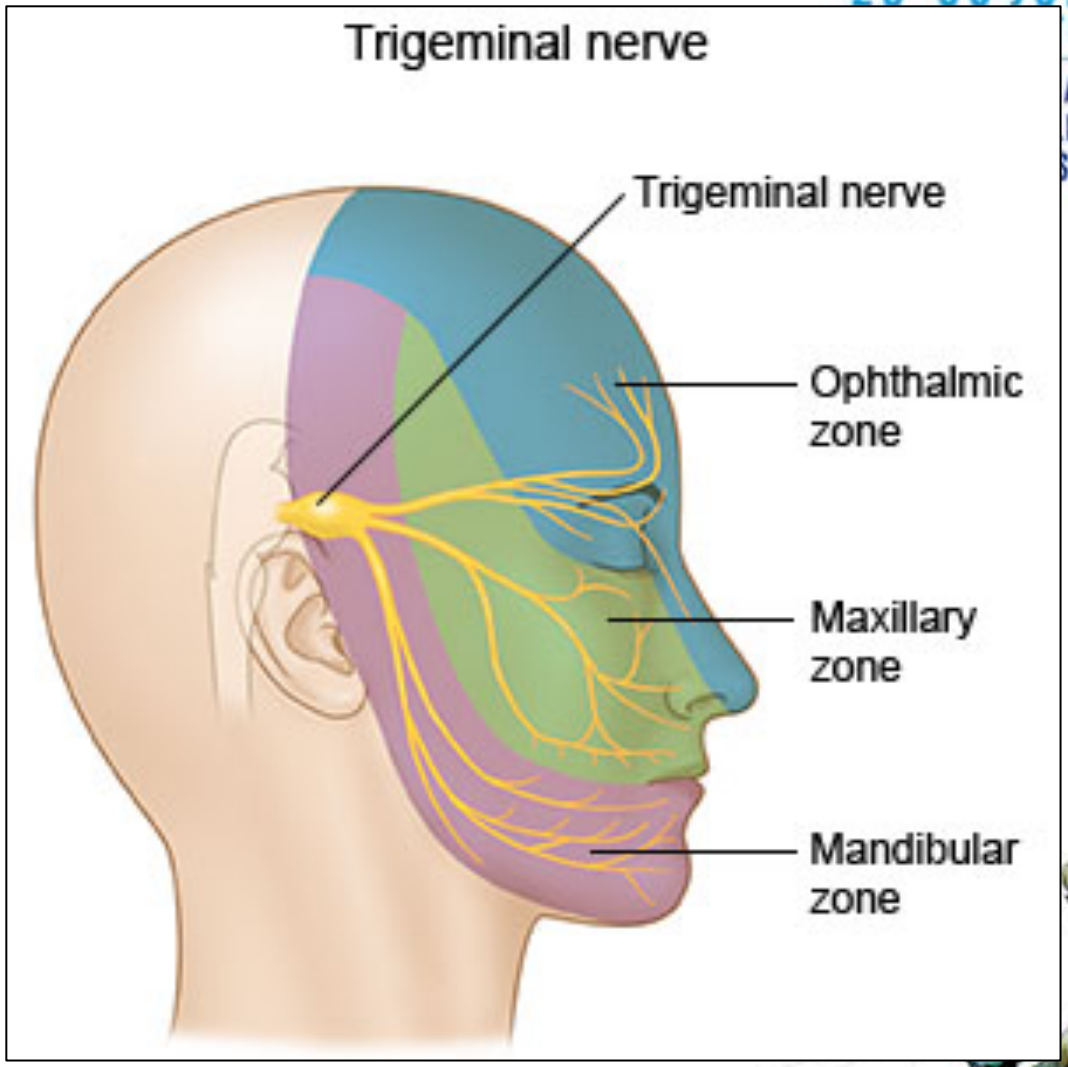
- local tumor invasion
- myositis
- joint inflammation (arthritis)
- postoperative wound
- post-treatment effects (radiation)



THE TYPES OF PAIN

Type III. Neuropathic Pain – pain that occurs due to nerve injury

- diabetes
- radiation / chemo - neuritis

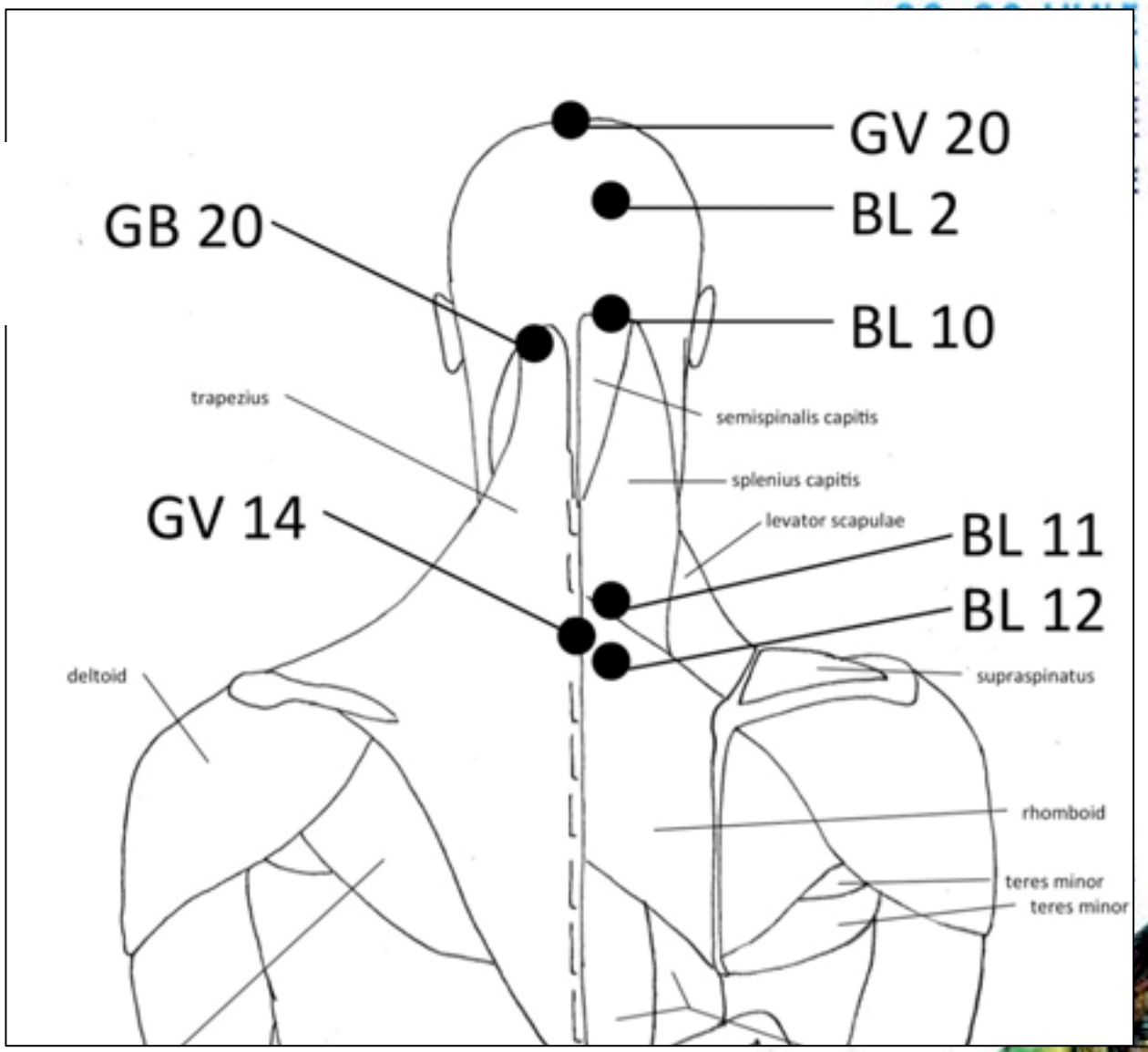


EXAMPLE 1: RADIATION FIBROSIS

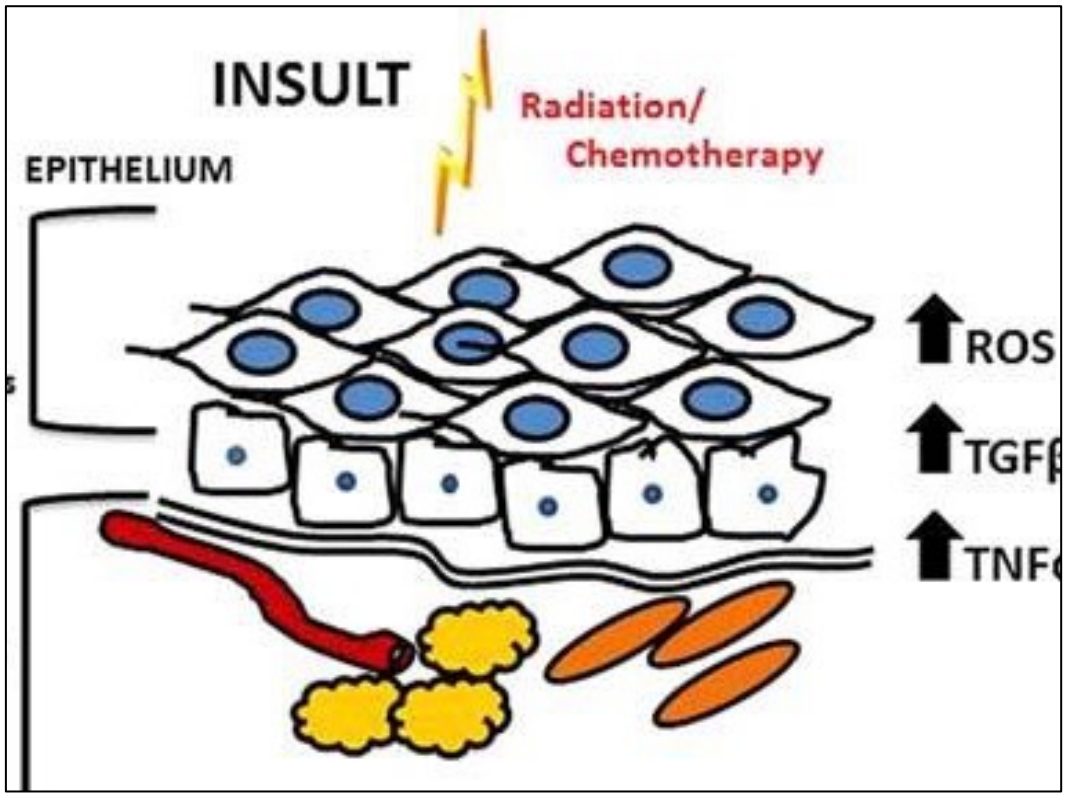
Myelo-radiculo-plexo-neuro-myopathy

Radiation induced:

- dystonia
- fibrosis
- neuritis

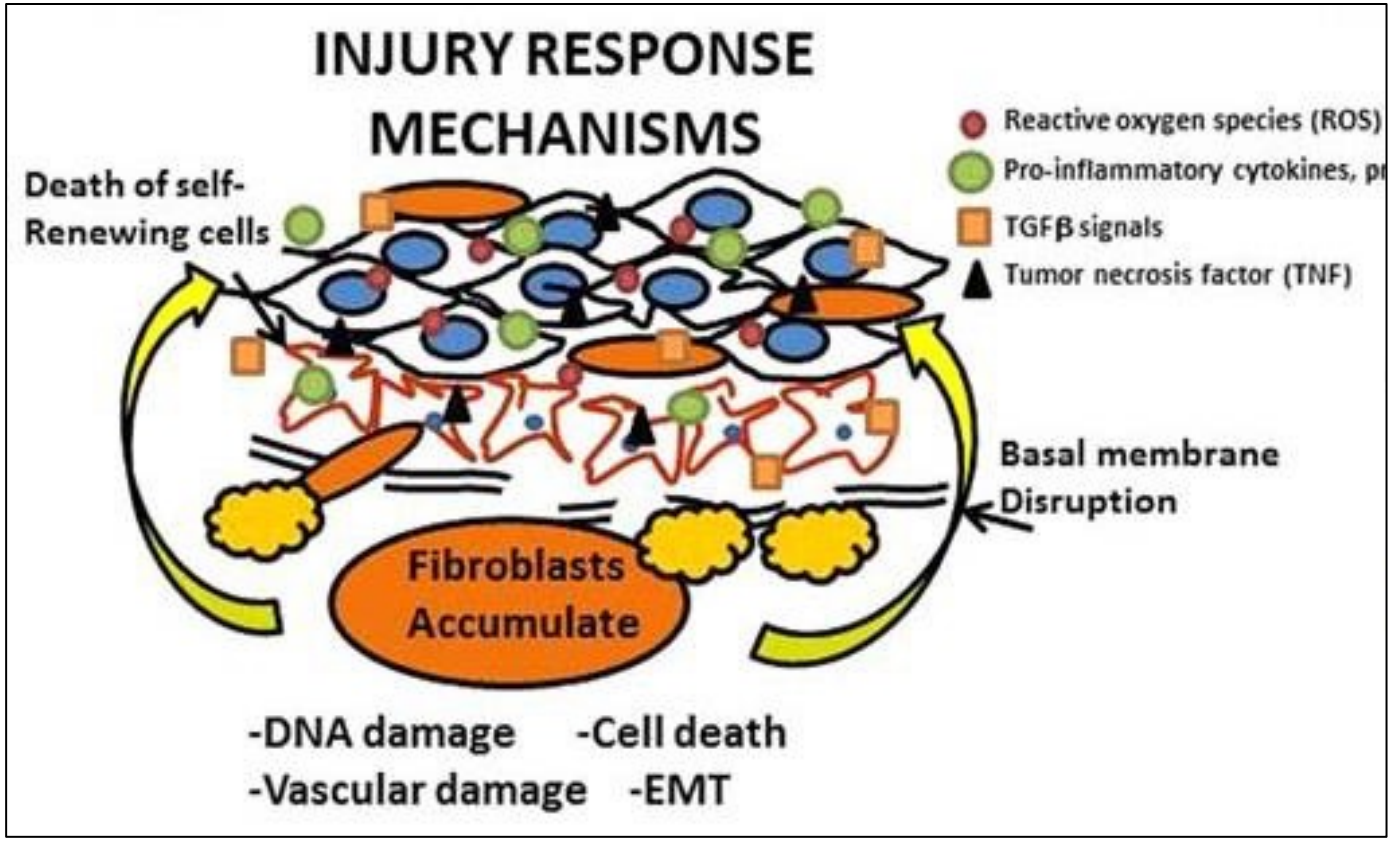


EXAMPLES 1: RADIATION FIBROSIS



- triggers inflammation
- stimulates transdifferentiation of fibroblasts into myofibroblasts
- myofibroblasts produce excess collagen, extracellular matrix

EXAMPLES 1: RADIATION FIBROSIS



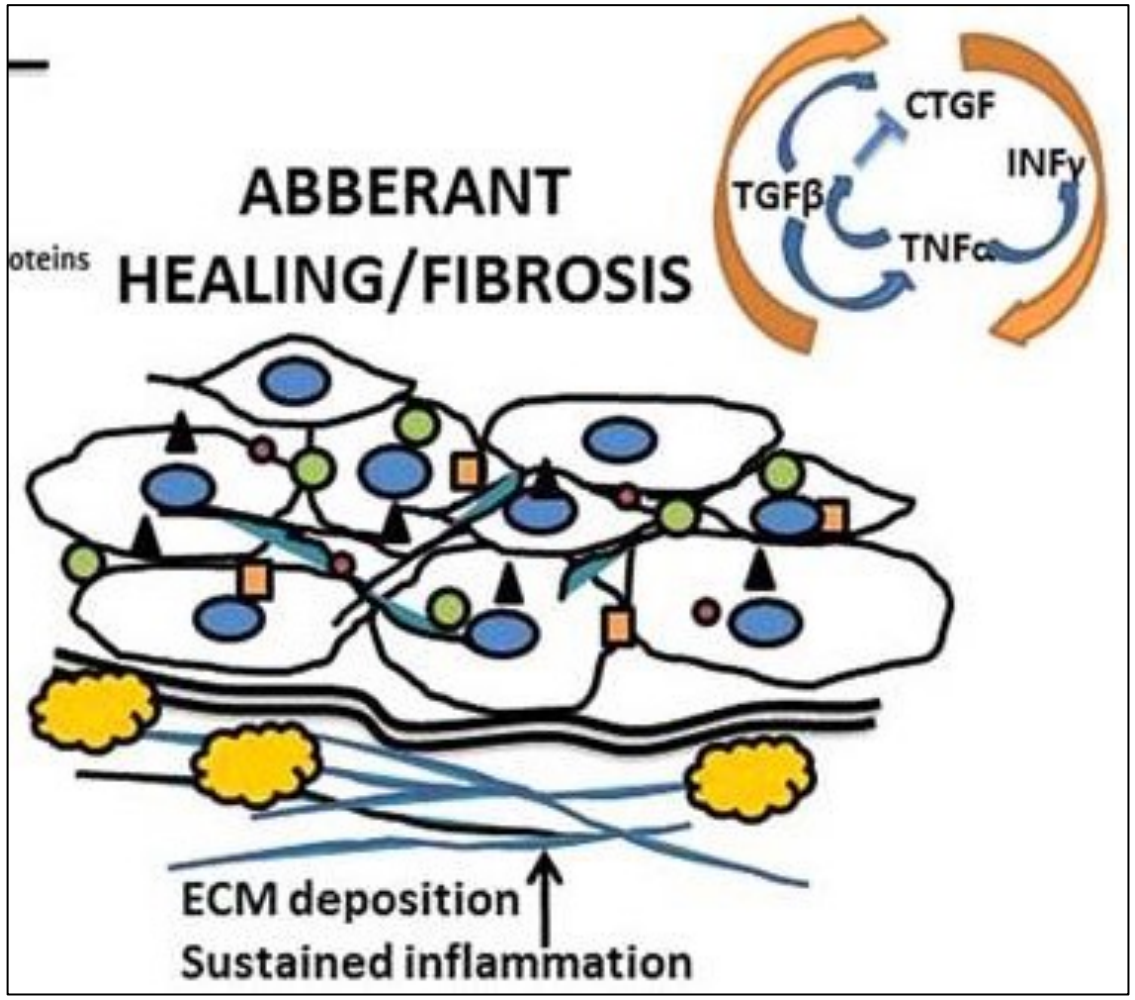
Directly correlates with

- increased radiation dose
- hypofractionation (fewer fractions require greater doses)
- increased field size
- prolongation of therapy

Worsened with

- concurrent use of chemotherapy
- surgical management

EXAMPLES 1: RADIATION FIBROSIS



Occurs 4–12 months after radiation therapy

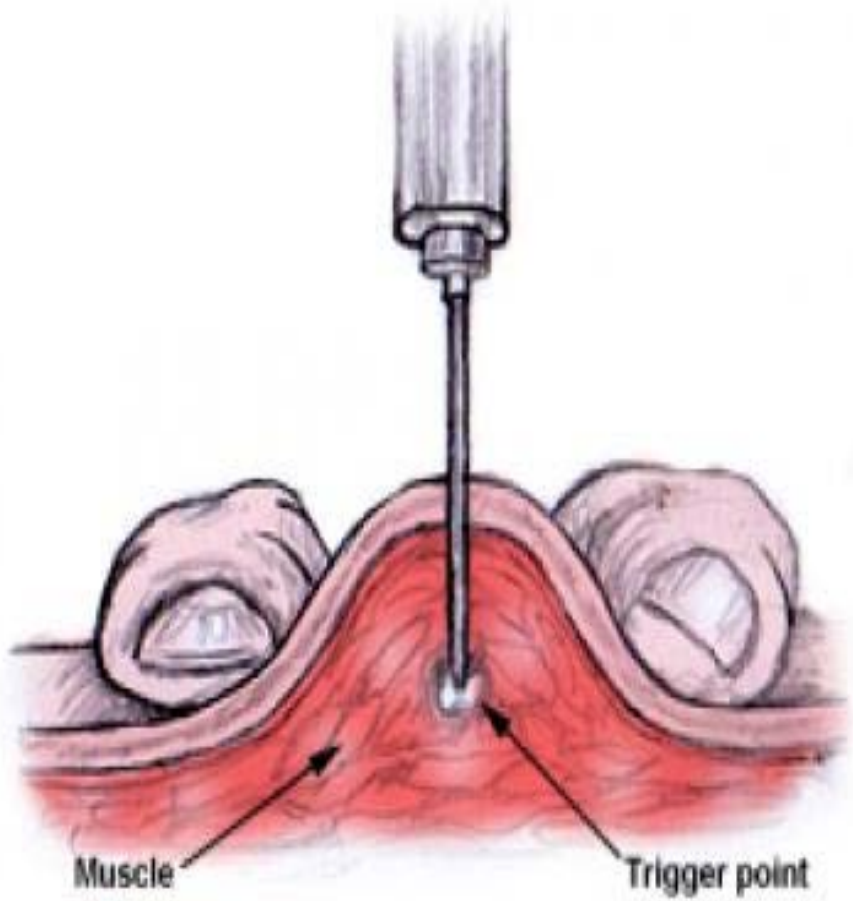
- skin induration and thickening
- muscle shortening and atrophy
- limited joint mobility

NEUROPATHY/FIBROSIS PAIN TREATMENT

Interventional Pain Treatment + Physiotherapy

Physiotherapy
- reducing lymphedema
- preserve motion

Interventional
- trigger point injections
- botulinum toxin A injection
- radiofrequency lesion (RFL)



BOTULINUM TOXIN FOR NEUROPATHIC PAIN

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Level 1 evidence for targeted treatment of neuropathic pain

Subcutaneous Injection of Botulinum Toxin A Is Beneficial in Postherpetic Neuralgia FREE

Lizu Xiao, MD ✉, Sean Mackey, MD, PhD, Hui Hui, PhD, Donglin Xong, MD, Qian Zhang, MD, Deren Zhang, MD

Pain Medicine, Volume 11, Issue 12, 1 December 2010, Pages 1827–1833, https://doi.org/10.1111/j.1526-4637.2010.01003.x

Botulinum toxin for facial neuralgia

Debra K Fischoff & Silvia Spivakovsky

Evidence-Based Dentistry **19**, 57–58 (2018) | Download Citation

Botulinum toxin for myofascial pain syndromes in adults

Review | Intervention

Adriana Soares ✉, Régis B Andriolo, Álvaro N Atallah, Edina MK da Silva

First published: 25 July 2014

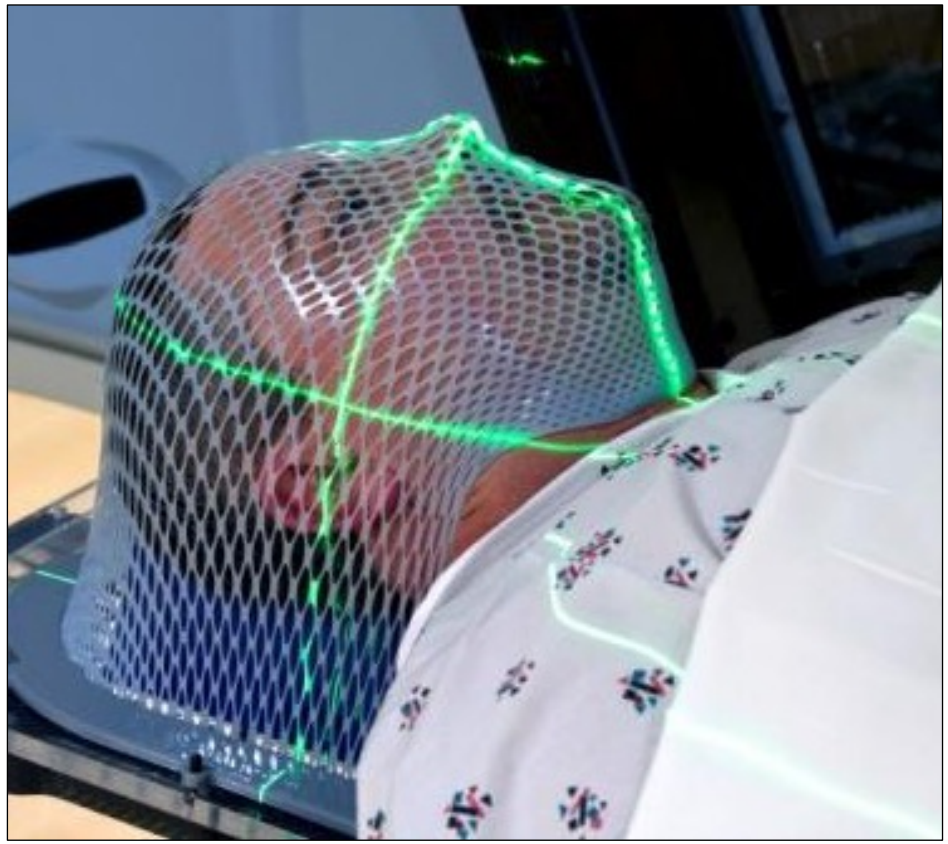
Editorial Group: Cochrane Pain, Palliative and Supportive Care Group

EXAMPLE 2 – TRIGEMINAL NEURALGIA

Patient with cTxN2cMo Tonsil SCCa

- combined chemoIMRT approach
- 6 months later – no evidence of disease (2014)

Just severe PAIN



TRIGEMINAL NEURALGIA TREATMENT ALGORITHM

Oncologist

medical management

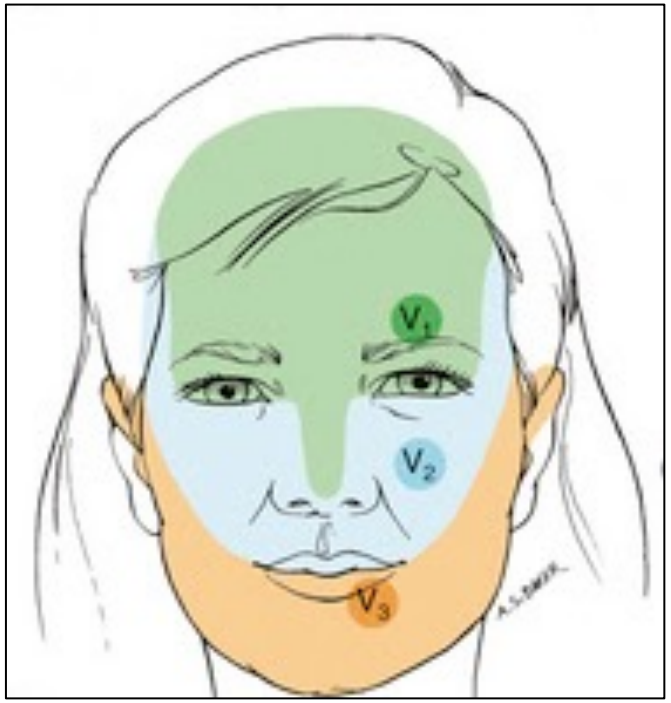
Pain Specialist

diagnostic block

treatment blocks

Neurosurgeon

2nd, 3rd order neuron treatment

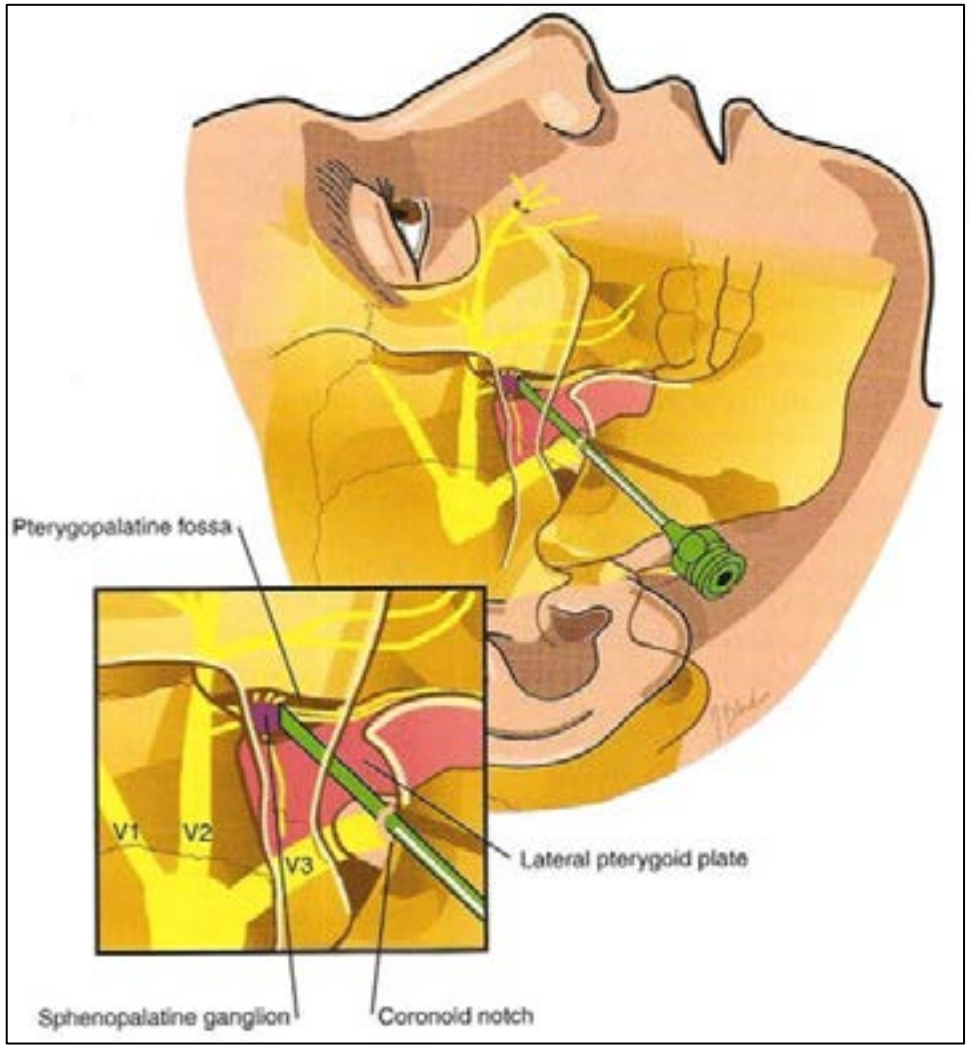


TRIGEMINAL NEURALGIA TREATMENT ALGORITHM

25 patients with **refractory trigeminal neuralgia**

1. fluoroscopic guided block with local anesthetic and steroid for diagnostic and therapeutic benefit

2. if durable benefit obtained, ongoing conservative treatment was continued on an as-needed basis



TRIGEMINAL NEURALGIA: TREATMENT PROTOCOL

3. Only short-term benefit (<1 week)?
   - referral made to functional neurosurgery (NS)
     - radiofrequency ablation (RFA)
     - balloon neurolysis
     - stereotactic radiosurgery (SRS)

4. Malignancy precluding these approaches?
   - neurosurgery:
     - brainstem ligation of the trigeminal nerve

25 patients with **severe refractory** trigeminal neuralgia

Triage	Number of patients
Patient decided not to have treatment	2
No relief from block (no further treatment)	4
Long term relief with block	12
Short term relief with block (further triaged) • radiation oncology (stereotactic radiosurgery) • neurosurgery (RFA, DREZ, ligation)	4 ○ 1 ○ 3
Recently treated (no follow up yet)	3
TOTAL	25

16/20 treated – durable pain relief

Triage	Number of patients
Patient decided not to have treatment	2
No relief from block (no further treatment)	4
Long term relief with block	12
Short term relief with block (further triaged) • radiation oncology (stereotactic radiosurgery) • neurosurgery (RFA, DREZ, ligation)	4 ○ 1 ○ 3
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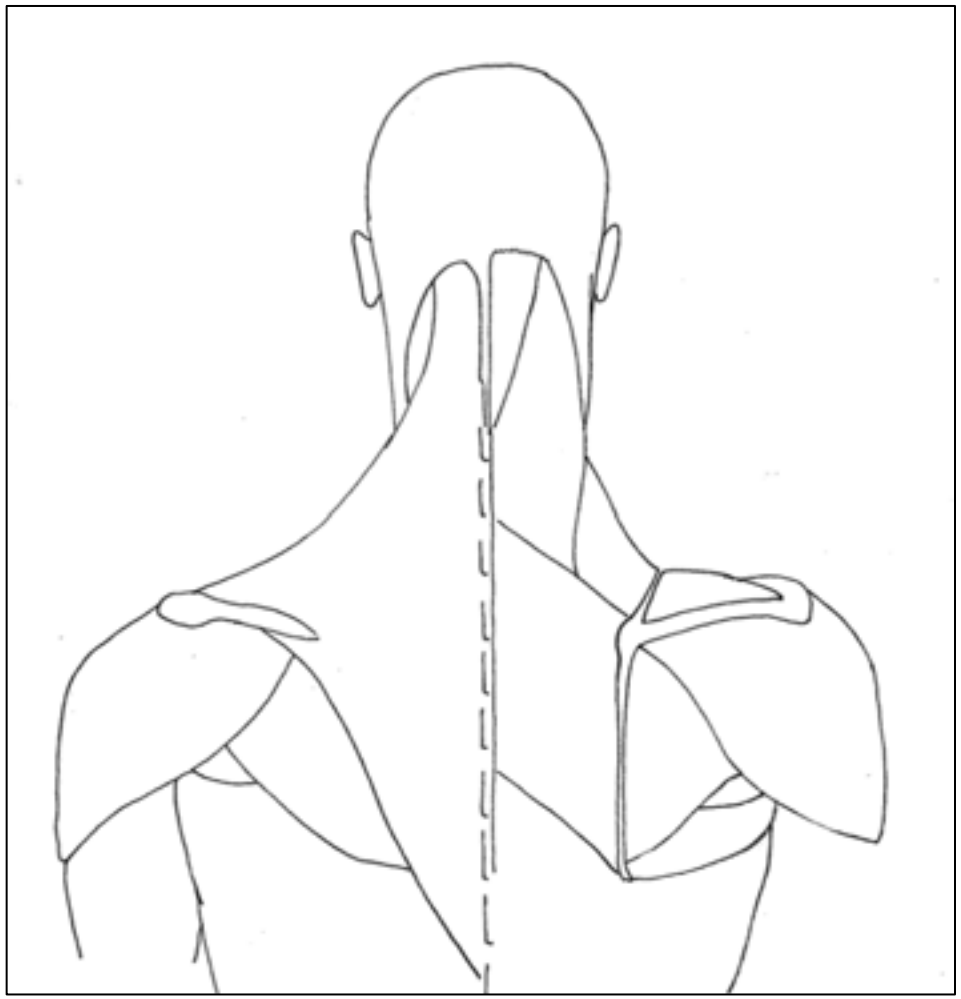
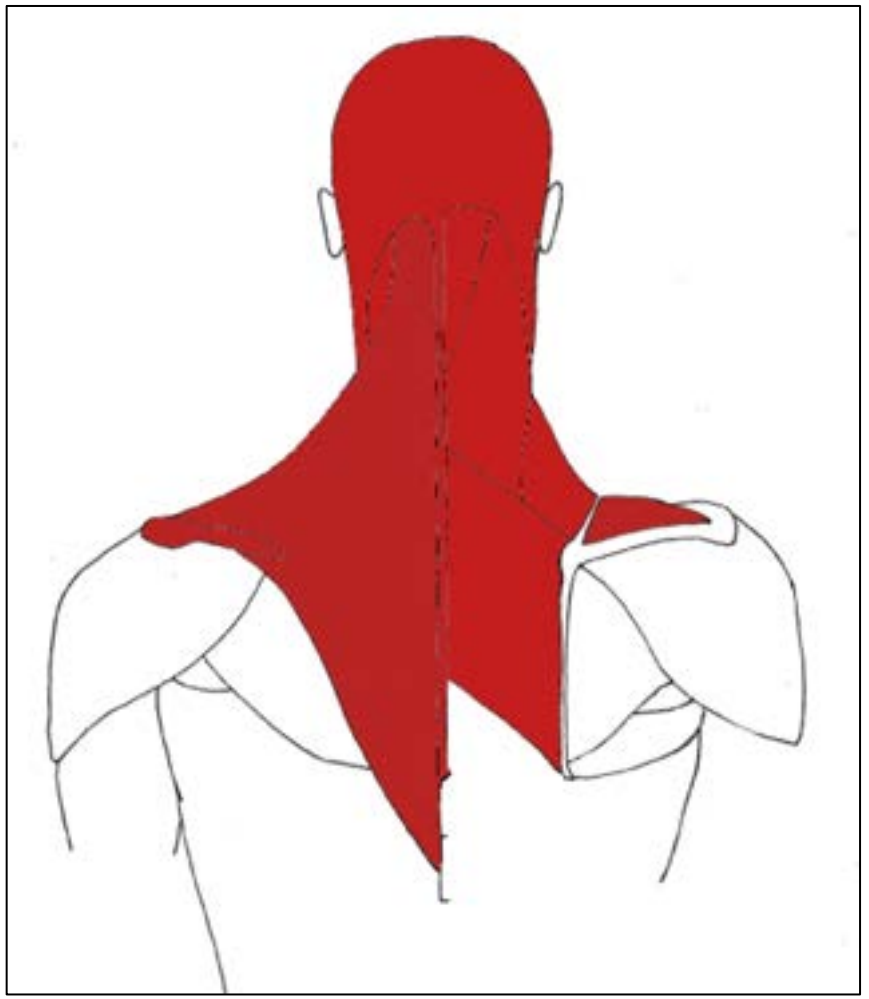
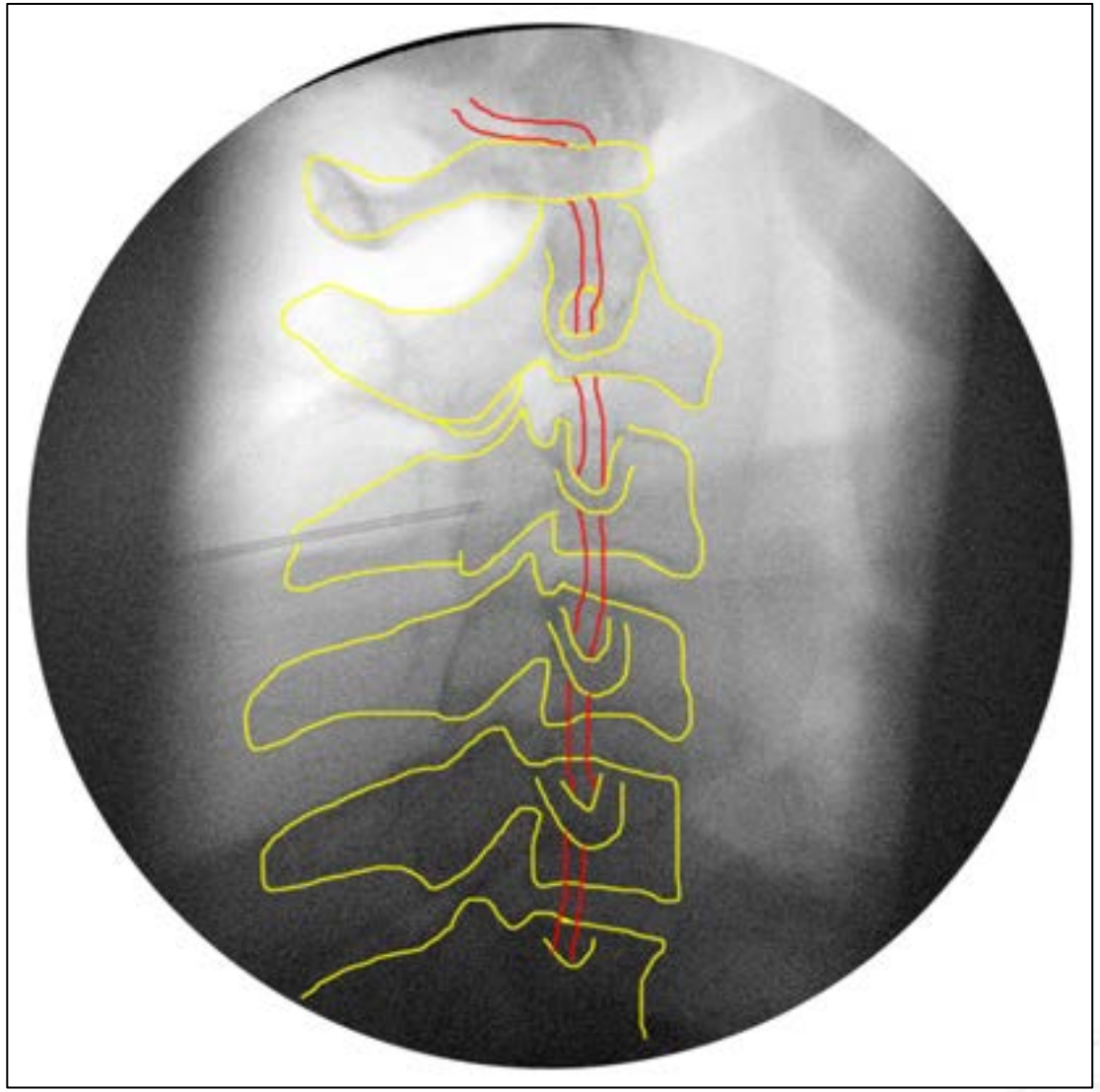
EXAMPLE 3 – CERVICAL SPONDYLOSIS





EXAMPLE 3 – CERVICAL SPONDYLOSIS

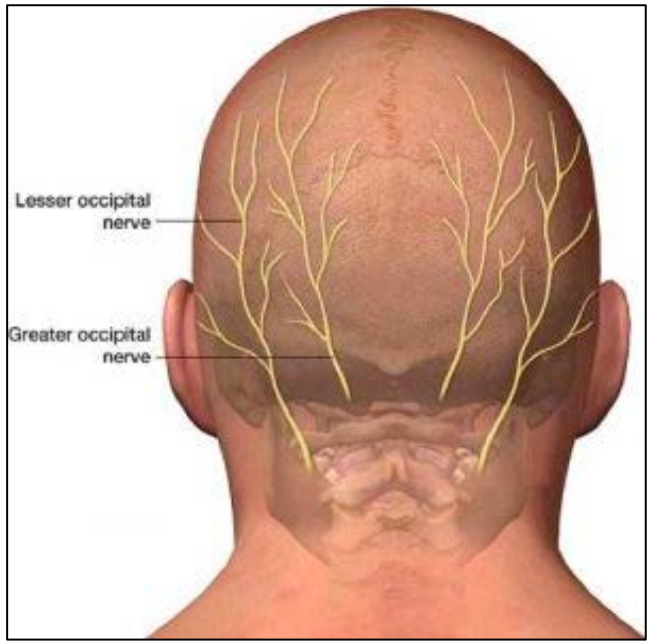
Arthritis of the neck (spondylosis)

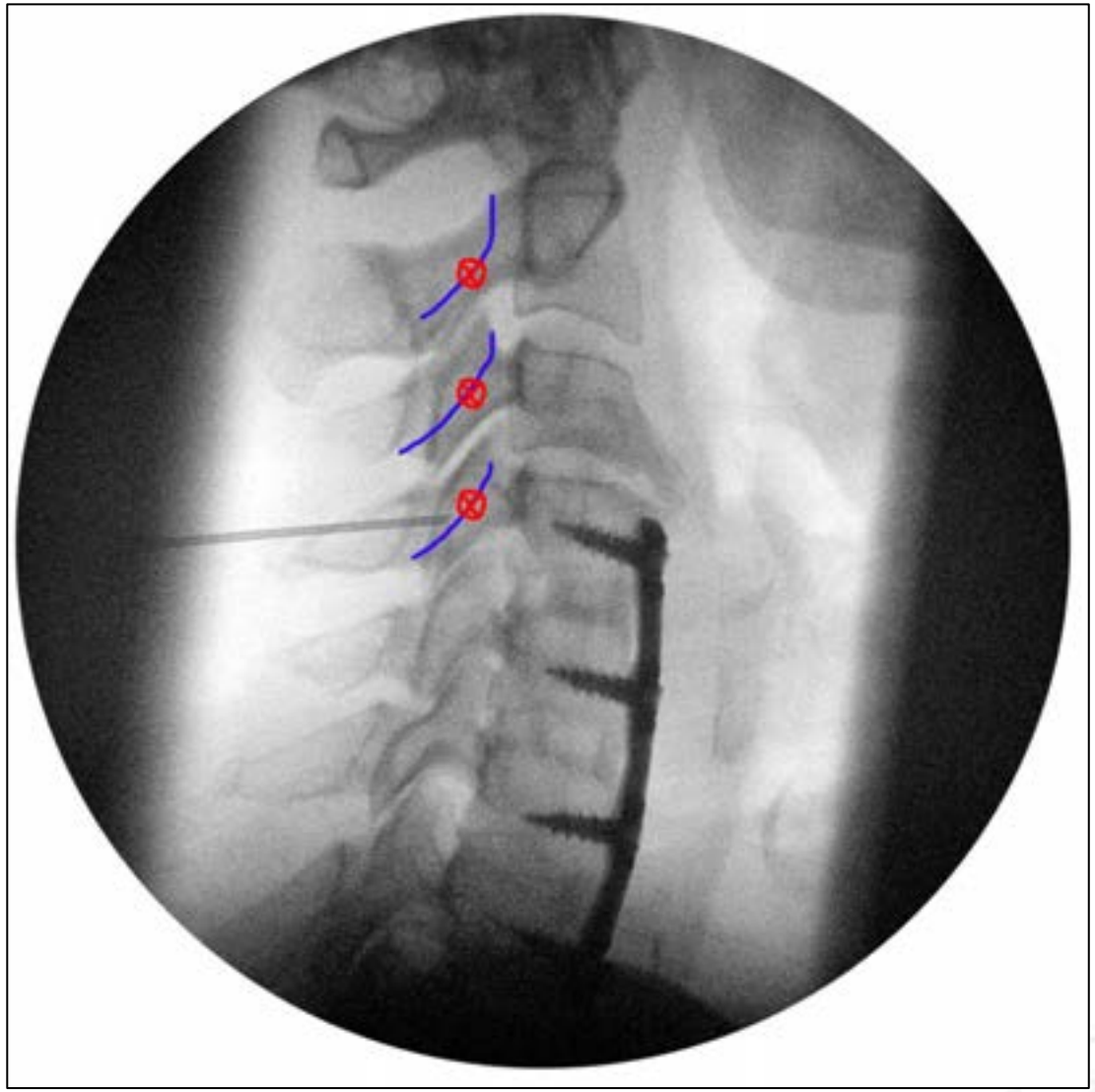


EXAMPLE 3 – CERVICAL SPONDYLOSIS

Arthritis of the neck (spondylosis)

Occipital neuralgia (C2, C3)





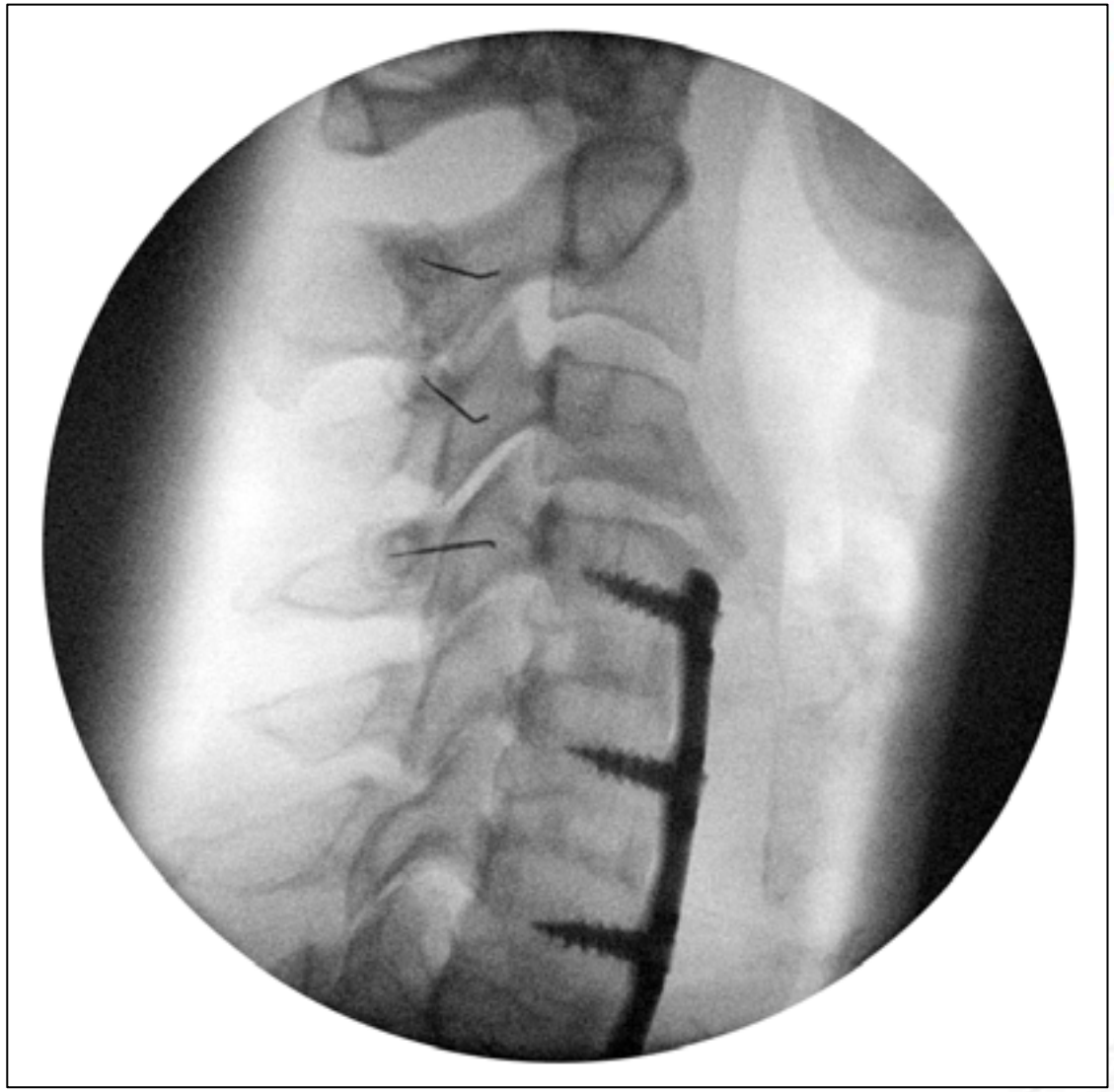
EXAMPLE 3 – CERVICAL SPONDYLOSIS

Arthritis of the neck (spondylosis)

Occipital neuralgia (C2, C3)

Step 1: diagnostic block

Step 2: treatment (steroid, or radiofrequency ablation)



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Pain Med. 2016 Apr;17(4):658-69. doi: 10.1111/pme.12928. Epub 2016 Feb 2.

The Effectiveness and Risks of Fluoroscopically-Guided Cervical Medial Branch Thermal Radiofrequency Neurotomy: A Systematic Review with Comprehensive Analysis of the Published Data.

Engel A[1], Rappard G[2], King W[3], Kennedy DJ[4]; Standards Division of the International Spine Intervention Society.

Curr Pain Headache Rep. 2018 Feb 23;22(3):18. doi: 10.1007/s11916-018-0673-9.

Systematic Review of Radiofrequency Ablation and Pulsed Radiofrequency for Management of Cervicogenic Headaches.

Grandhi RK[1], Kaye AD[2], Abd-Elsayed A[3].

SUMMARY

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SUPPORTIVE CARE MAKES EXCELLENT CANCER CARE POSSIBLE

- There is little evidence-based literature for interventional pain in oncology
- Traditional treatments for head and neck pain are applied in the same manner to oncology patients
- Interventional options can play a role in:

    1. Enabling cancer treatment
    2. Improving QOL in cancer survivors
    3. Palliating persistent severe pain in dying patients

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Cervical Radiofrequency Ablation (RFA) for head and neck pain

1. Systematic Review of Radiofrequency Ablation and Pulsed Radiofrequency for Management of Cervicogenic Headaches.
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   PMID: 29476360 [PubMed - in process]

2. The Effectiveness and Risks of Fluoroscopically-Guided Cervical Medial Branch Thermal Radiofrequency Neurotomy: A Systematic Review with Comprehensive Analysis of the Published Data.
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Botox

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