

AAP BRS podcast: Cancer Part 1 – Pain and Rehab

Pain and Red Flags

- Achy pain can have **several** underlying causes
- Further imaging is warranted if pain has associated **red flags**
- Potential **red flags** are:
 - Unexplained weight loss
 - History of cancer
 - Age > 50
 - Persistent pain despite conservative measures
 - Night pain
 - Pain with weight bearing

Next Step: Work Up

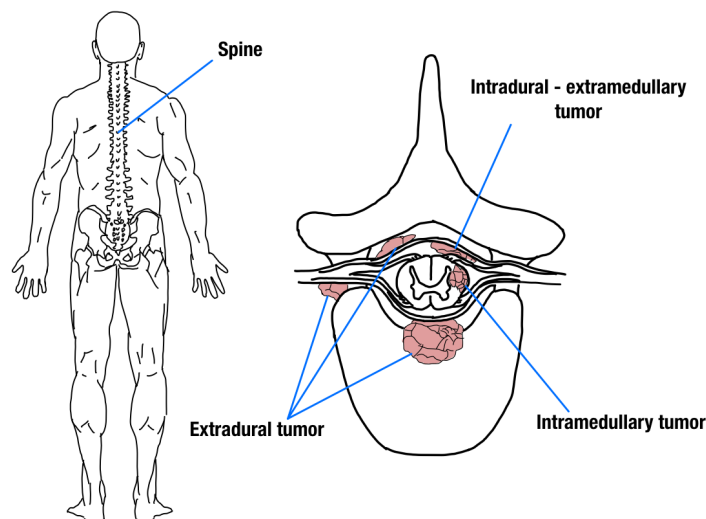
- An **MRI** is the next step to identify potential lesions
- Bone lesions are most likely **metastatic** in nature
- A **biopsy** would follow to identify the primary tumor
- Cancers that tend to metastasize to bone can be remembered by mnemonic “**BLT** with **P**ickle on **R**ye with **M**ustard and **M**ayo”
 - **B**reast, **L**ung, **T**hyroid, **P**rostate, **R**enal, **M**ultiple **M**yeloma

Goals of Rehab in Cancer Patients

- **Prevention**
 - Attempt to **prevent** impairments that will arise from disease process and proposed treatment
- **Recovery**
 - Identify impairments and maximizing **recovery** from those impairments
- **Support**
 - Focus is maintaining **independence** by improving activities of daily living
- **Palliation**
 - Focus is **quality of life** and managing pain

Spinal Cord Tumors

- Majority are **benign** but can grow large enough to cause **mass effects** such as weakness, sensation changes, bladder/bowel disturbances
- Categorized by **location** (extradural vs. intradural intramedullary vs. intradural extramedullary)
- **Extradural** tumors mnemonic is “**EMS**”
 - **E**xtramedullary, **M**eningioma, **S**chwannoma
- **Intradural intramedullary** tumors mnemonic is “**AEI**”
 - **A**strocytoma, **E**pendymoma, **I**ntramedullary
- **Intradural extramedullary** tumors mnemonic is “**No More Spinal Masses**”
 - **N**eurofibroma, **M**eningioma, **S**chwannoma, **M**etastasis



Pharmaceutical Cancer Pain Treatment

- The World Health Organization has designed a **four-step algorithm** for treating pain related to cancer:
 1. Acetaminophen, NSAIDs, and adjunctive or neuropathic medications
 2. Max out medications from step 1 then add opioid such as codeine, hydrocodone, or Tramadol (SNRI could also be considered)
 3. Add strong opioid such as methadone, hydromorphone, or fentanyl
 4. Add an intervention or change oral medication to intrathecal

Minimizing Side Effects

- Opioids have a plethora of **side effects** including constipation, nausea, sedation, urinary retention, pruritis, respiratory depression, and mental status changes
- It's a **balancing act** to address pain associated with malignancy while minimizing adverse effects
- **Intrathecal delivery** can minimize adverse side effects
 - Medication is administered directly on the spinal cord, minimizing amount of medication in systemic circulation

Major Takeaways: Things to Keep in Mind

1. Be on **alert** for red flags
2. Know which primary tumors most often **metastasize to bone**
3. **Different classifications** of spinal cord tumors
4. **Goals** for cancer rehab
5. WHO **Four-Step algorithm** for cancer pain treatment
6. **Minimizing side effects** of opiates