



# INCIDENCE OF MYOFASCIAL PAIN

## **Incidence of Myofascial Pain In Primary, Secondary and Tertiary Care - A cohort study**

**Negev Bar M.D.**

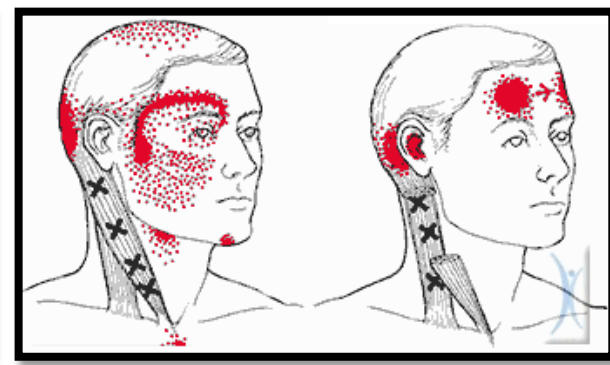
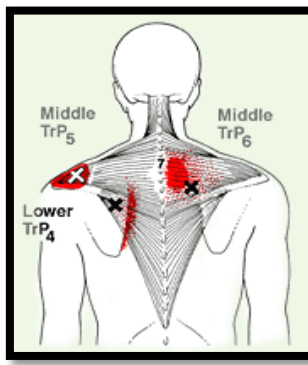
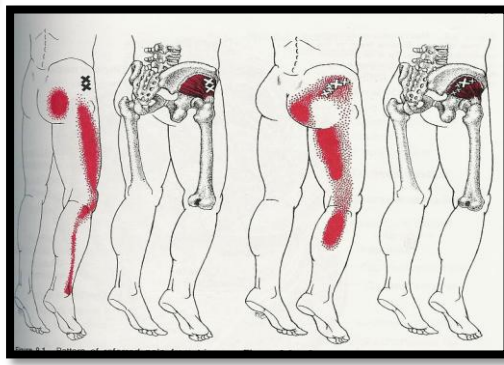
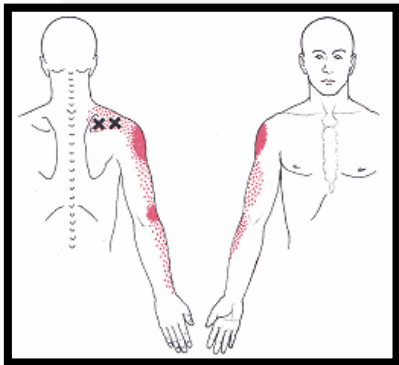
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# MYOFASCIAL PAIN - CLINICAL FEATURES

## History

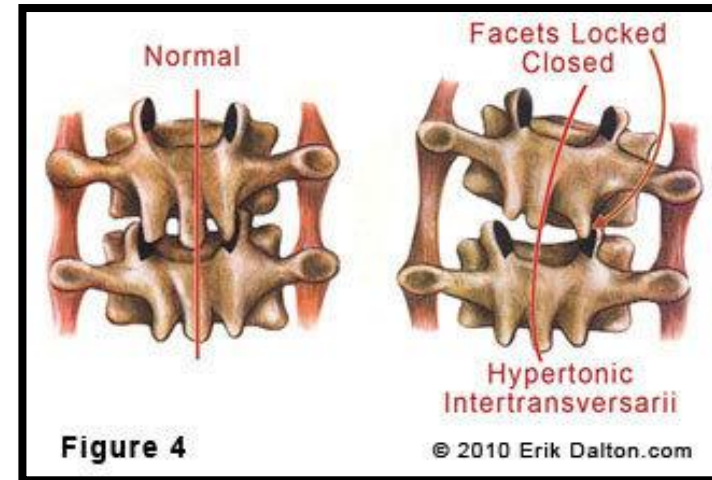
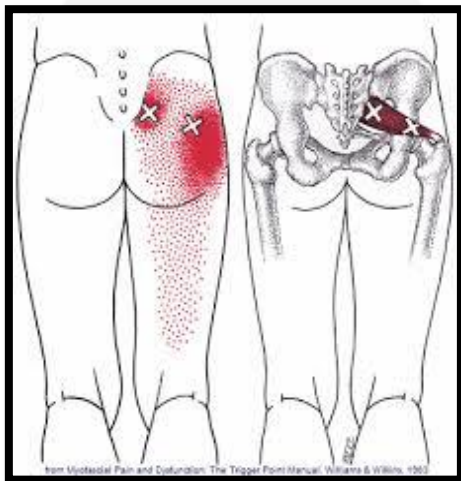
- **Regional Pain** - Local or **referred pain pattern** from active trigger point (TrP) → <http://www.triggerpoints.net/>
  - Acute, chronic or recurrent pain
  - Mild disturbing pain to severe excruciating pain
  - Vague, diffuse vs. sharp, localized pain
  - Poor response to medications (including opioids)
  - “Mechanical features”: activity increases the pain and rest decreases it



# MYOFASCIAL PAIN - CLINICAL FEATURES

## History

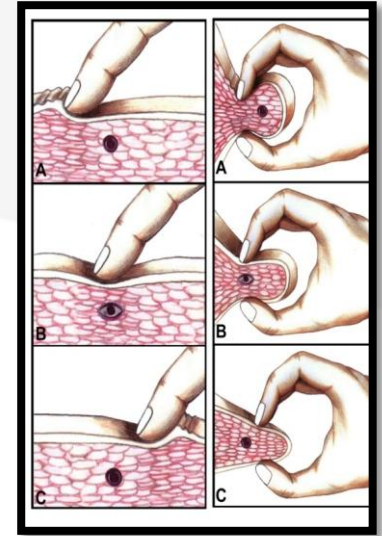
- **Other symptoms:**
  - “Neuropathic-like” features - Paresthesia, burning , numbness
  - “Nociceptive-like” features - Arthralgia (facet, etc)
  - Tinnitus, nausea , dizziness etc.
  - “Chronic pain triage”: poor sleep, depressed mood & malfunction



# MYOFASCIAL PAIN - CLINICAL FEATURES

## Physical examination

- **The affected muscle:**
  - Reduced range of motion (ROM) – reversible !
  - Muscle weakness
  - Taut band - palpable (tender “rope” like thickening)
  - Trigger point (TrP)
    - Palpable nodule (1-4mm pea-like in the taut band)
    - Very tender - “jump sign” (trigger the pain)
    - The patient’s pain can be re-produced by pressing the TrP
  - Local twitch response (LTR) can be elicited by needling the TrP



<https://www.youtube.com/watch?v=BYO4Bu4y-5Q>



# MYOFASCIAL PAIN - CLINICAL FEATURES

## Physical examination

- **Other signs - Local cutaneous autonomic dysfunction:  
(seen only in chronic pain)**
  - Vasomotor (temperature or color changes)
  - Pilomotor ( cutis anserina = goose bumps/flash)
  - Sudomotor (abnormal sweating or edema)



# MYOFASCIAL PAIN - CLINICAL CRITERIA

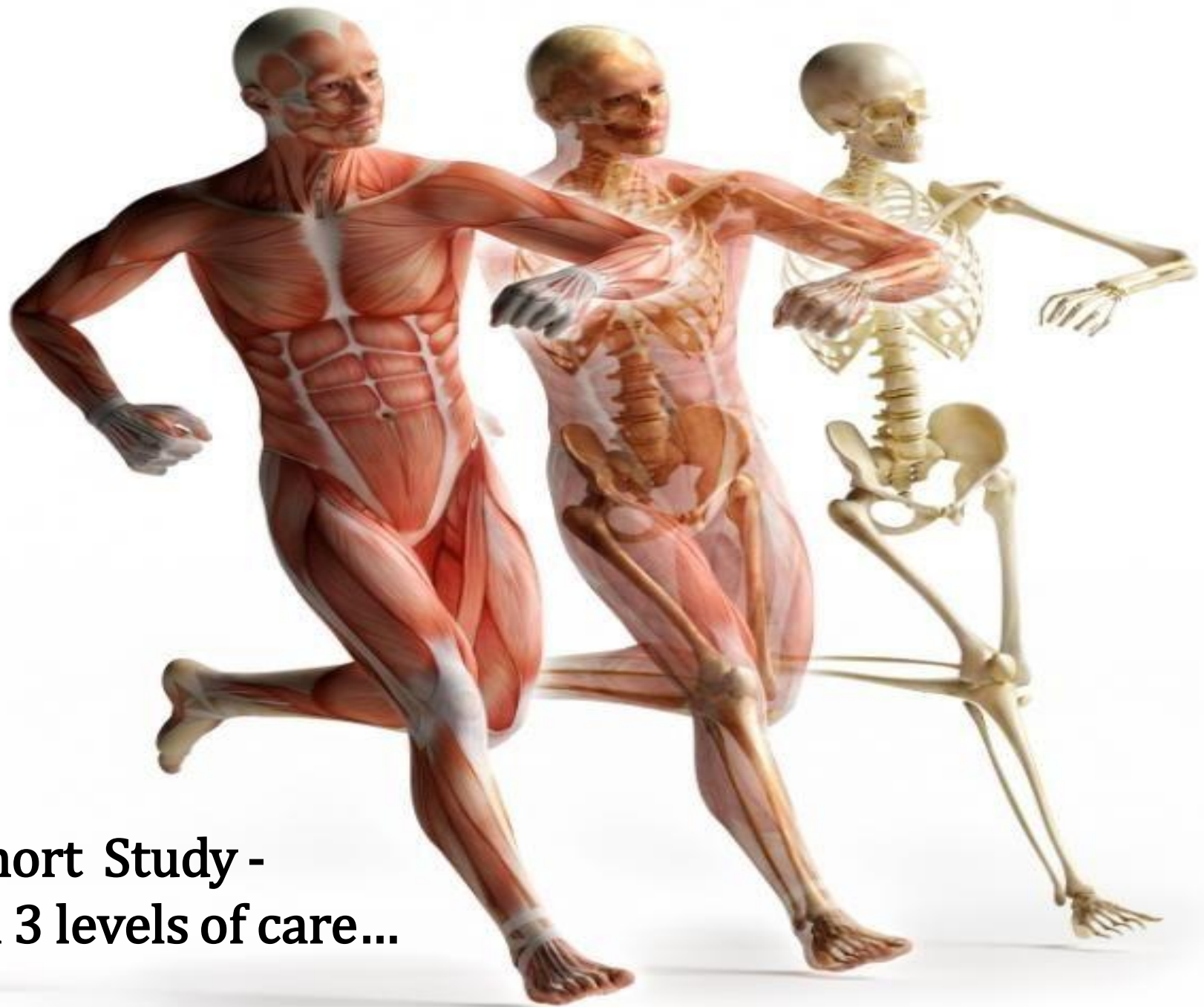
## Regional Pain

Sign / symptom	Difficulty	Mean kappa	Diagnostic value alone
Spot Tenderness	*	0.7	*
Referred Pain	**	0.47	*
Palpable Band	*** / *****	0.54	**
Pain Recognition	**	0.59	***
Twitch Response	****	0.23	****

- TrPs and MFP are not a diagnosis by exclusion
- No Imaging or lab test are needed







**Cohort Study -  
in 3 levels of care...**

# INCIDENCE OF MFP – PRIMARY CARE

## A Family Physician Clinic (Israel)



- Kibbutz Dalia & Kibbutz Ein-Shemer – 2 countryside villages
  - Rural clinics - 650 patients each with 1 family physician , 2 nurses.
  - Multi-generational population, from newborns to end of life care



לגעת בכאב Touching the pain

החברה הישראלית לרפואת שריר שלד  
The Israeli Society of Musculoskeletal Medicine





# INCIDENCE OF MFP – PRIMARY CARE

## A Family Physician Clinic (Israel)

- 6 months, Cohort study in a family physician clinic
- All patients with pain (excluding cancer pain)

127 patients 138 pain episodes

- Age 11-85 (mean 58), 61% females
- 13% chronic pain, 87% acute pain, 13% recurrent episodes
- 92% myofascial pain
- 27% low back pain



# INCIDENCE OF MFP – SECONDARY CARE

## Community based pain consultation - Co-visit model:

- The family physician host the pain trustees in the primary clinic
  - Holistic pain evaluation
  - Bio-psycho-social approach
  - Low cost service
  - Improved availability
  - The patient has an active role in healing
  - Multidisciplinary Teamwork
  - Empowers the primary physician



# INCIDENCE OF MFP – SECONDARY CARE

## Co-visit pain consultant in the community (Israel)



- Yokneam - a medium size township in the north of Israel
  - Alonim Clinic - 6500 patients, 4 family physicians + 1 resident
  - Mainly adults population, average to high socio-economic status



# INCIDENCE OF MFP – SECONDARY CARE

## Co-visit pain consultant in the community (Israel)

- 9 months, Cohort study in a community pain service
- All patients referred to the pain service

95 patients 100 pain episodes

- Age 22-83 (mean 51), 60% females
- 51% chronic pain, 49% acute pain, 5% recurrent episodes
- 75% myofascial pain
- 41% low back pain





**MONTREAL**

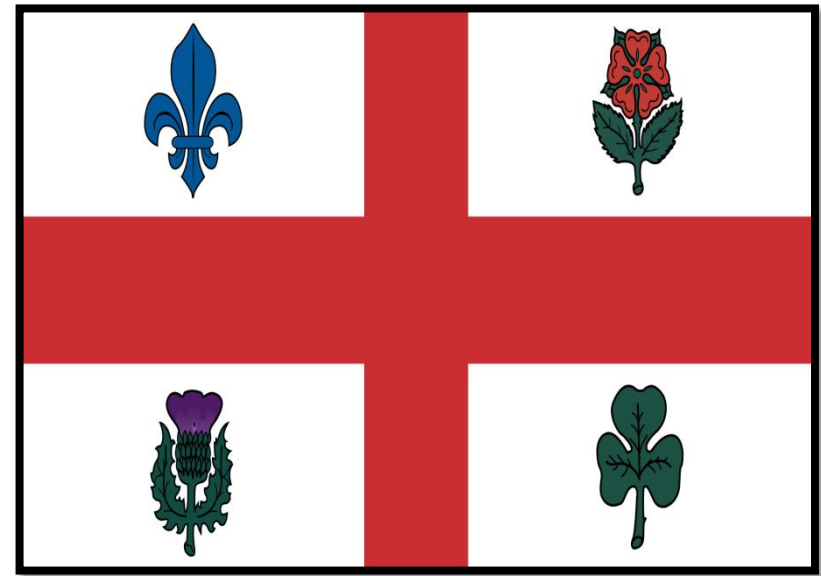




# INCIDENCE OF MFP – SECONDARY CARE

## Co-visit pain consultant in the community (Canada)

- Montreal – a metropolitan in Quebec province, east Canada
  - Herzl clinic - 30,000 patients, 20 family physicians and 30 residents.
  - A huge university clinic with a big multi-cultural immigrant population.



# INCIDENCE OF MFP – SECONDARY CARE

## Co-visit pain consultant in the community (Canada)



- 9 months, Cohort study in a community pain service
- All patients referred to the pain service

63 patients 64 pain episodes

- Age 20-86 (mean 51), 49% females
- 81% chronic pain, 19% acute pain, 4% recurrent episodes
- 73% myofascial pain
- 43% low back pain



# INCIDENCE OF MFP – TERTIARY CARE

## University hospital - Chronic pain clinic (Canada)



- Montreal General Hospital - The main hospital at McGill university
  - AEPMU -13 physicians, 5 psychologist , 2 physiotherapists, 1 chiropractor
  - High volume pain center, academic and research activity, multidisciplinary



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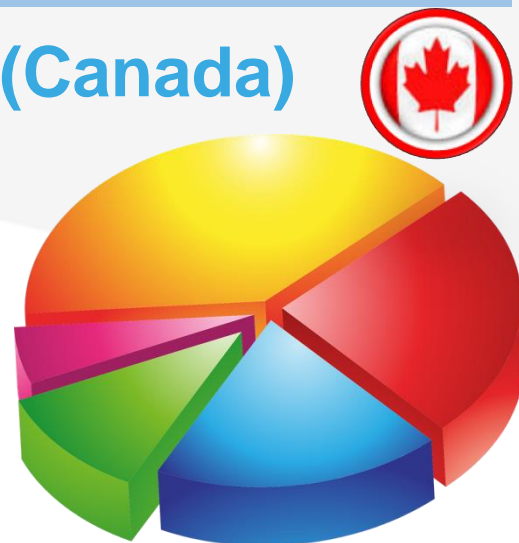
# INCIDENCE OF MFP – TERTIARY CARE

## University hospital - Chronic pain clinic (Canada)

- 12 months, Cohort study in a hospital pain center
- Patients referred to the chronic pain clinic

### 127 patients

- Age 22-93 (mean 54), 62% females
- 99% chronic pain, 1% acute pain (“ultra-chronic” pain)
- 63% myofascial pain
- 53% low back pain

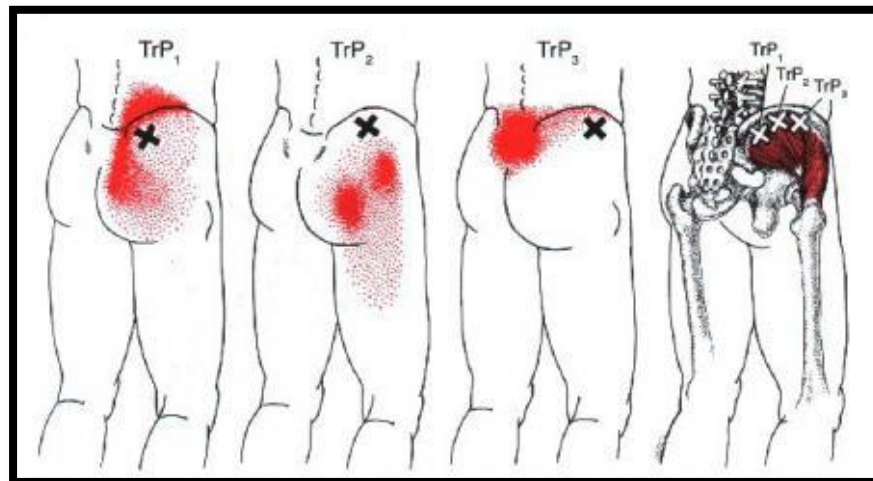


# TAKE HOME MESSAGE



## Myofascial Pain Syndrome

- Is the most common etiology for pain, at all levels of care.
  - Primary care > 90%
  - Secondary care > 70%
  - Tertiary care > 50%
- Low back pain is the most common site of pain



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# THE MYOFASCIAL ENIGMA...

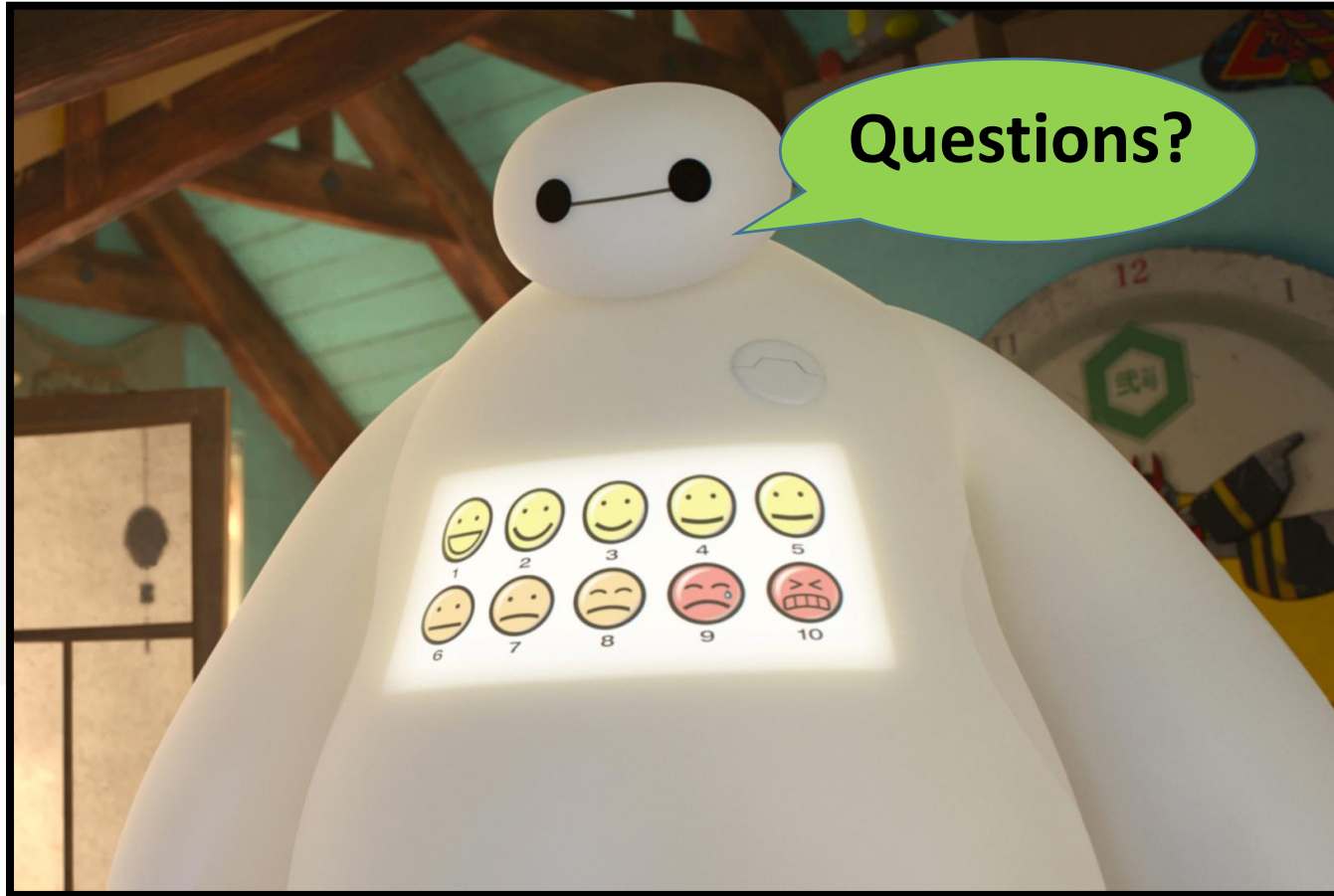


לגעת בכאב **Touching the pain**

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# THANK YOU !



<https://www.youtube.com/watch?v=uEeBXUUOBil&authuser=0>

לגעת בכאב Touching the pain

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