PART 1: CLASSIFICATION OF CHRONIC PAIN

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CHRONIC PAIN

- AFFECTS APPROXIMATELY 20% OF THE POPULATION
- SEVERELY IMPACTS QUALITY OF LIFE, SOCIAL LIFE, WORKFORCE ACTIVITIES, OVERALL HEALTH
- MOST COMMON PAIN LOCATIONS:
  - LOW BACK
  - HEADACHE
  - NECK PAIN
  - JOINT PAIN
  - GENERALIZED PAIN/FIBROMYALGIA

CHRONIC PAIN

- AN INDIVIDUAL AND SUBJECTIVE EXPERIENCE
- OCCURS DUE TO A VARIETY OF BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL FACTORS
  - HAVE TO RECOGNIZE AND TREAT ALL OF THESE FACTORS!
- ETIOLOGIES:
  - PERSISTENT POST-SURGICAL PAIN (PPSP)
  - INJURY/ACCIDENT
  - DEGENERATIVE
  - MEDICAL ILLNESS OR TREATMENT
  - IDIOPATHIC

CHRONIC PAIN

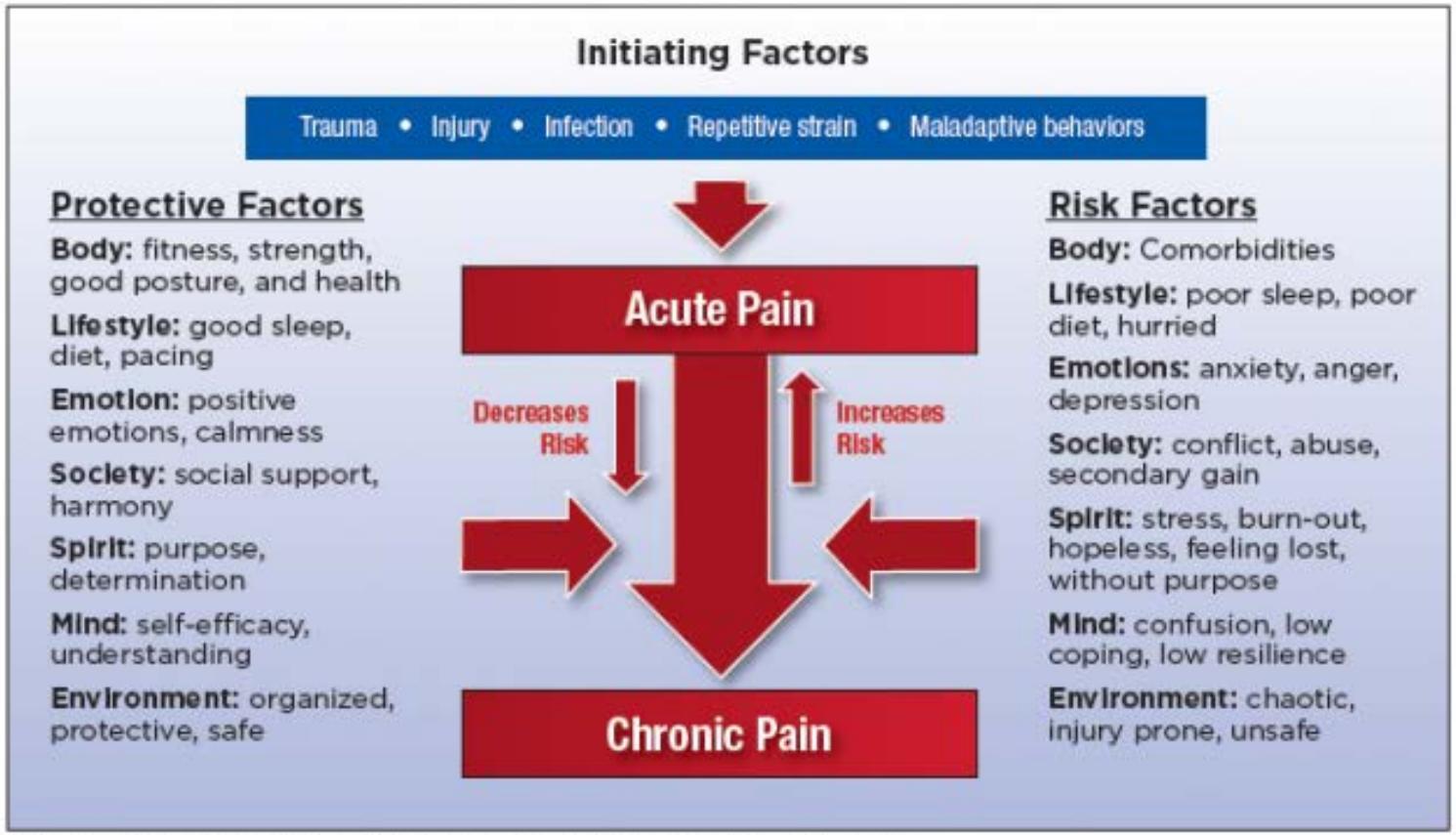


Figure 1. The impact of risk and protective factors in the progression from acute to chronic pain.

Friction J, Gupta A, Weisburg MB, et al. (2015, Dec 9). *Can we prevent chronic pain?* Practical Pain Management. Retrieved from https://www.practicalpainmanagement.com/treatments/can-we-prevent-chronic-pain.

DIAGNOSIS: PAIN ASSESSMENT

- HISTORY – OPQRST
  - ONSET
  - PROVOCATION/PALLIATION
  - QUALITY
  - REGION/RADIATION
  - SEVERITY
  - TIMECOURSE

- HISTORY+
  - MEDICATION TRIALS AND RESPONSE
    - ADEQUATE DOSE?
    - ADEQUATE LENGTH OF MEDICATION TRIAL?
  - RELATED CONDITIONS
    - SLEEP
    - FUNCTION
    - MOOD
  - SOCIAL HISTORY
    - SUBSTANCE ABUSE
    - SOCIAL SITUATION

DIAGNOSTIC EVALUATION

- FULL PHYSICAL EXAM
  - BE GENTLE!
  - PAIN BEHAVIORS AND EFFORT
  - NEUROLOGIC AND MUSCULOSKELETAL EXAM
  - EVALUATION OF GENERALIZED TENDERNESS
    - GENERALIZED PAIN SYNDROME
    - OPIOID-INDUCED HYPERALGESIA
  - PALPATION OF TRIGGER POINTS

DIAGNOSTIC EVALUATION

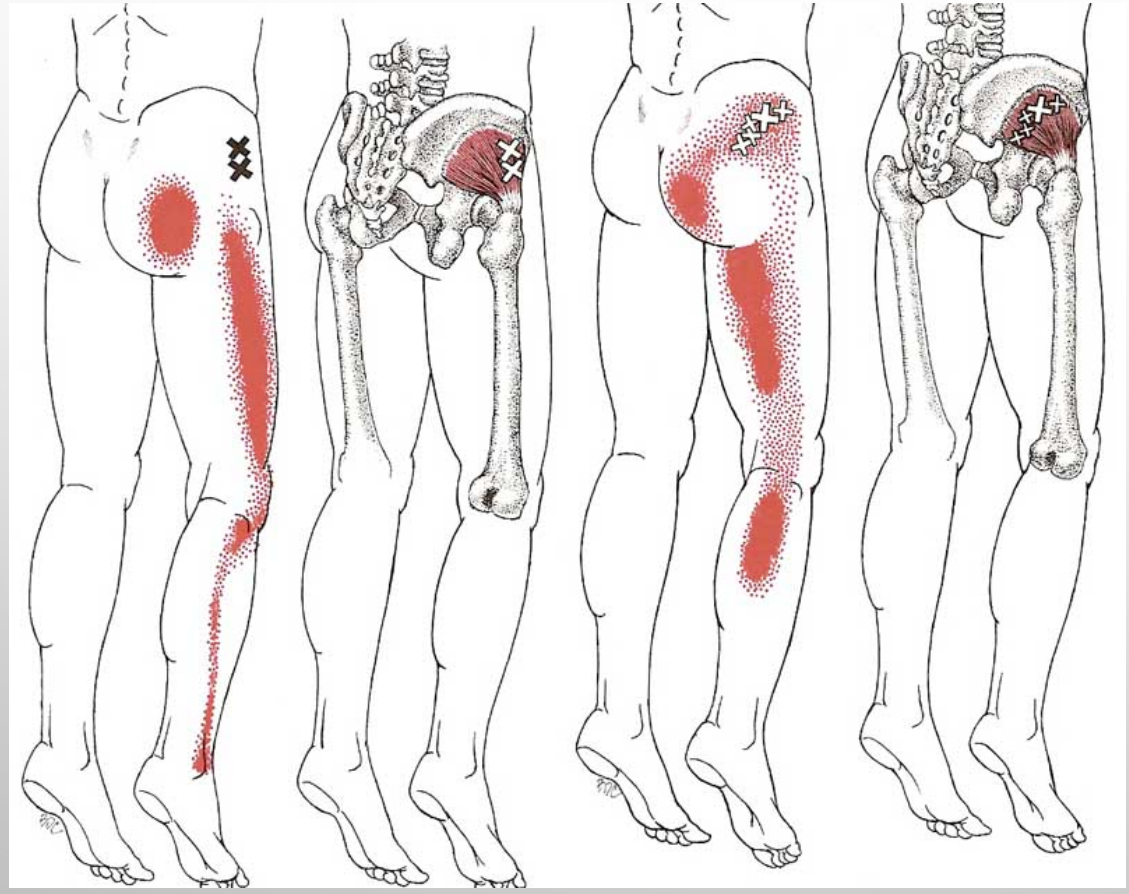
- CHARACTERIZE TYPES OF PAIN
  - MYOFASCIAL
  - GENERALIZED
  - NEUROPATHIC
  - NOCICEPTIVE – VISCERAL
  - NOCICEPTIVE - SOMATIC
  - MOST PATIENTS WILL HAVE MIXED PAIN TYPES

- TRY TO PUT IT ALL TOGETHER
  - *WHY* DO THEY HAVE PAIN?

MYOFASCIAL PAIN

- EXTREMELY UNDER-RECOGNIZED!
- NOT THE SAME AS FIBROMYALGIA – REALLY QUITE THE OPPOSITE!
- PAIN RESULTING FROM DISORGANIZED MUSCLE FIBERS
  - TRIGGER POINTS – PAIN RADIATES WITH PALPATION
  - CAN MIMIC RADICULAR PAIN AND BE VERY PAINFUL – MORE THAN "MUSCLE PAIN"
  - POST-SURGICAL
  - DECONDITIONING
  - ALTERED GAIT OR POSITIONING

MYOFASCIAL PAIN

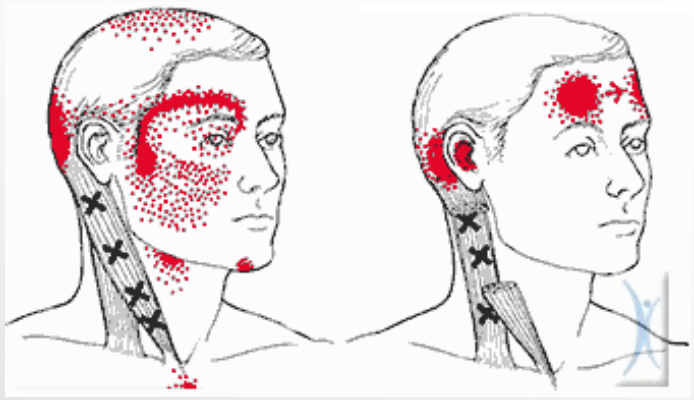


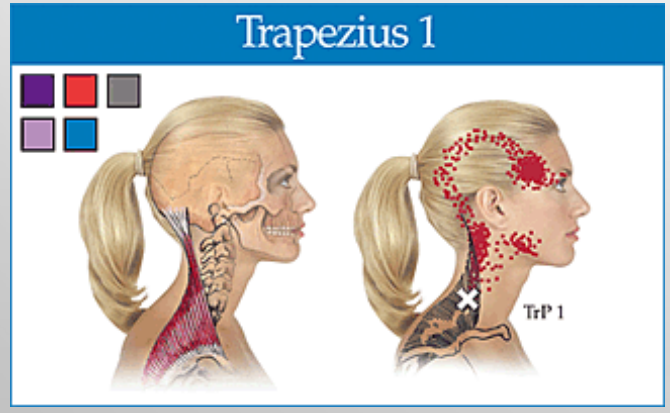
- GLUTEUS MINIMUS AND MEDIUS TRIGGER POINT REFERRAL PATTERN
  - LOOKS LIKE L5 RADICULITIS

Characteristic referral patterns of trigger points

Simon and Travells "*Myofascial Pain and Dysfunction: the Trigger Point Manual*"

MYOFASCIAL PAIN





- STERNOCLEIDOMASTOID AND TRAPEZIUS TRIGGER POINTS
  - LOOKS LIKE TENSION HEADACHE
  - CAN MIMIC OR PROVOKE MIGRAINE HEADACHE

NEUROPATHIC PAIN

- "PAIN ARISING AS DIRECT CONSEQUENCE OF A LESION OR DISEASE AFFECTING THE SOMATOSENSORY SYSTEM"
- AFFECTS 3-8% OF POPULATION
- CHARACTERISTICS
  - BURNING
  - SHOOTING
  - ELECTRIC
  - LIMITED BENEFIT FROM OPIOIDS
  - MAY OR MAY NOT BE CONFINED TO KNOWN NERVE/NERVE ROOT DISTRIBUTION

NEUROPATHIC PAIN SYNDROMES

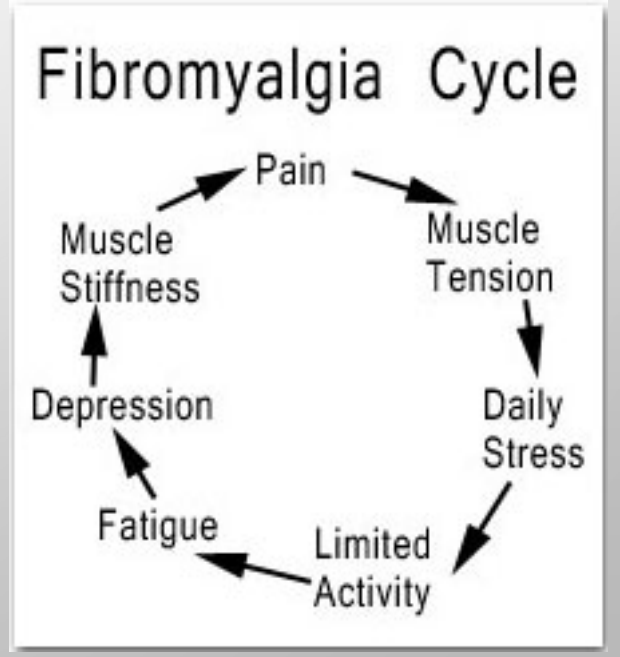
- PERIPHERAL NEUROPATHY
- PHANTOM LIMB PAIN
- POST-HERPETIC NEURALGIA
- MULTIPLE SCLEROSIS PAIN
- POST-SURGICAL NEUROPATHIC PAIN
- POST-INJURY NEUROPATHIC PAIN
- CHRONIC RADICULOPATHY
- COMPLEX REGIONAL PAIN SYNDROME

GENERALIZED PAIN SYNDROMES

- WIDESPREAD PAIN THROUGHOUT THE BODY
  - NOT MULTIPLE LOCATIONS BUT CONTINUOUS IN JOINTS, SOFT TISSUE, ETC
- VARIABLE QUALITY, USUALLY NO INCITING EVENT
- DIFFUSE TENDERNESS TO PALPATION THROUGHOUT BODY ON EXAM
  - ABSENCE OF SIGNIFICANT TRIGGER POINTS
- ASSOCIATED WITH DEPRESSION, POOR SLEEP
- THOUGHT DUE TO CENTRAL SENSITIZATION

FIBROMYALGIA

- SPECIFIC DIAGNOSIS WITHIN "GENERALIZED PAIN STATES"
- SPECIFIC DIAGNOSTIC CRITERIA
  - INCORPORATES SLEEP, COGNITIVE SYMPTOMS, OTHER SOMATIC SYMPTOMS INTO DIAGNOSIS
- NOT THE SAME AS MYOFASCIAL PAIN
- AFFECTS 2-4% OF THE POPULATION, FEMALE PREDOMINANCE
- OFTEN BEGINS IN MIDDLE ADULTHOOD



FIBROMYALGIA

Table 1: ACR clinical diagnostic criteria for fibromyalgia.[13]

1. Widespread pain index (WPI)† ≥ 7 and symptom severity (SS)‡ score ≥ 5 or WPI from 3 to 6 and SS score ≥ 9
2. Symptoms present for ≥ 3 months
3. No other explanation for pain

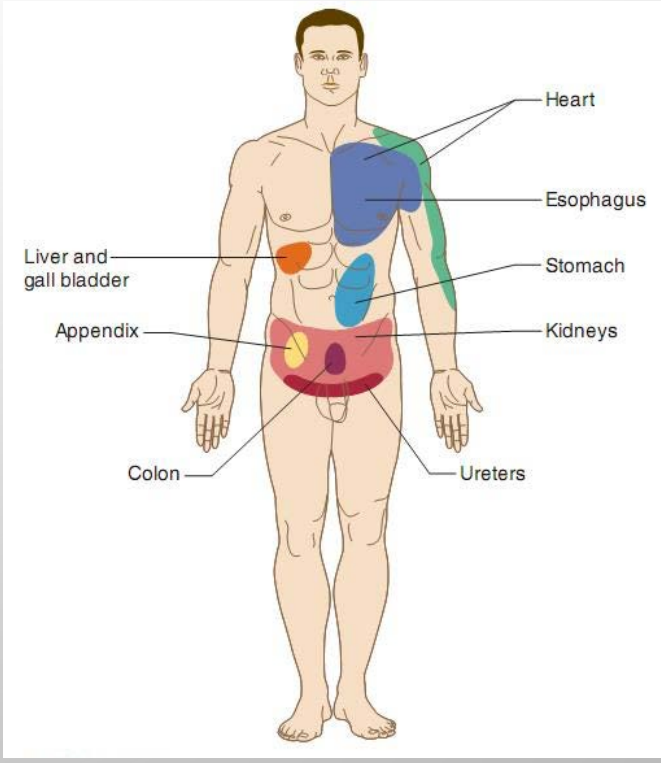
† *The WPI is a questionnaire that assesses pain extent and distribution across 19 body areas.*
‡ *The SS scale is a 4-item scale that assesses fatigue, cognitive difficulties, "waking unrefreshed," and somatic symptoms.*

Initially developed as a research tool not meant for clinical diagnosis

Fibromyalgia is a very specific diagnosis, many patients should instead be diagnosed with generalized pain

NOCICEPTIVE VISCERAL PAIN

- PAIN RESULTING FROM THORACIC, ABDOMINAL OR PELVIC VISCERA
  - DISTENSION, ISCHEMIA, INFLAMMATION
- POORLY LOCALIZED
- DULL, ACHING, PRESSURE, SQUEEZING
- NOT PARTICULARLY MOVEMENT-RELATED
- REFERRED TO SUPERFICIAL STRUCTURES
  - DIAPHRAGM → SHOULDER
  - ANGINA → LEFT NECK/ARM



VISCERAL PAIN

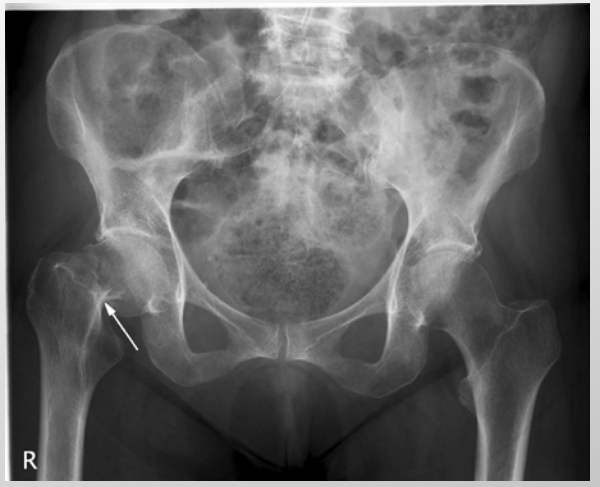
- REFERRED TO SUPERFICIAL STRUCTURES
  - DIAPHRAGM → SHOULDER
  - ANGINA → LEFT NECK/ARM
- CHRONIC ABDOMINAL AND PELVIC PAIN
- CANCER PAIN

Examples of Referred Pain

Origin of Pain	Site of Referred Pain
Appendicitis	Umbilical region
Angina pectoris	Arm, jaw
Aortic aneurysm	Back
Pleuritis	Shoulder
Cholecystitis	Right shoulder/scapular area
Gastroesophageal reflux	Chest
Urinary tract infection	Back, abdomen

NOCICEPTIVE SOMATIC PAIN

- ARISES FROM DAMAGE OR INJURY TO BONE, JOINT, MUSCLE, SKIN OR CONNECTIVE TISSUE
    - “MECHANICAL” PAIN
- WELL-LOCALIZED
- INTENSE ACHE, THROBBING, SHARP, STABBING, PINPRICK
- BONY PAIN
        - METASTASES, FRACTURES
        - DEGENERATIVE SPINE DISEASE
- JOINT PAIN
        - OSTEOARTHRITIS



THANK YOU!

- QUESTIONS OR COMMENTS?