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FROZEN SHOULDER SOLUTIONS

Strategic Treatment Planning Using Frequency Specific Microcurrent

Chandler AZ, March 2020
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A SYNDROME OF PARALYZING CONFUSION



Clearer understanding of the condition and diagnosis

How to apply new strategies for treatment

Case studies for inspiration

Definitions

The American Shoulder and Elbow Surgeons: "a condition of uncertain etiology characterized by significant restriction of both active and passive shoulder motion that occurs in the absence of a known intrinsic shoulder disorder." [1]

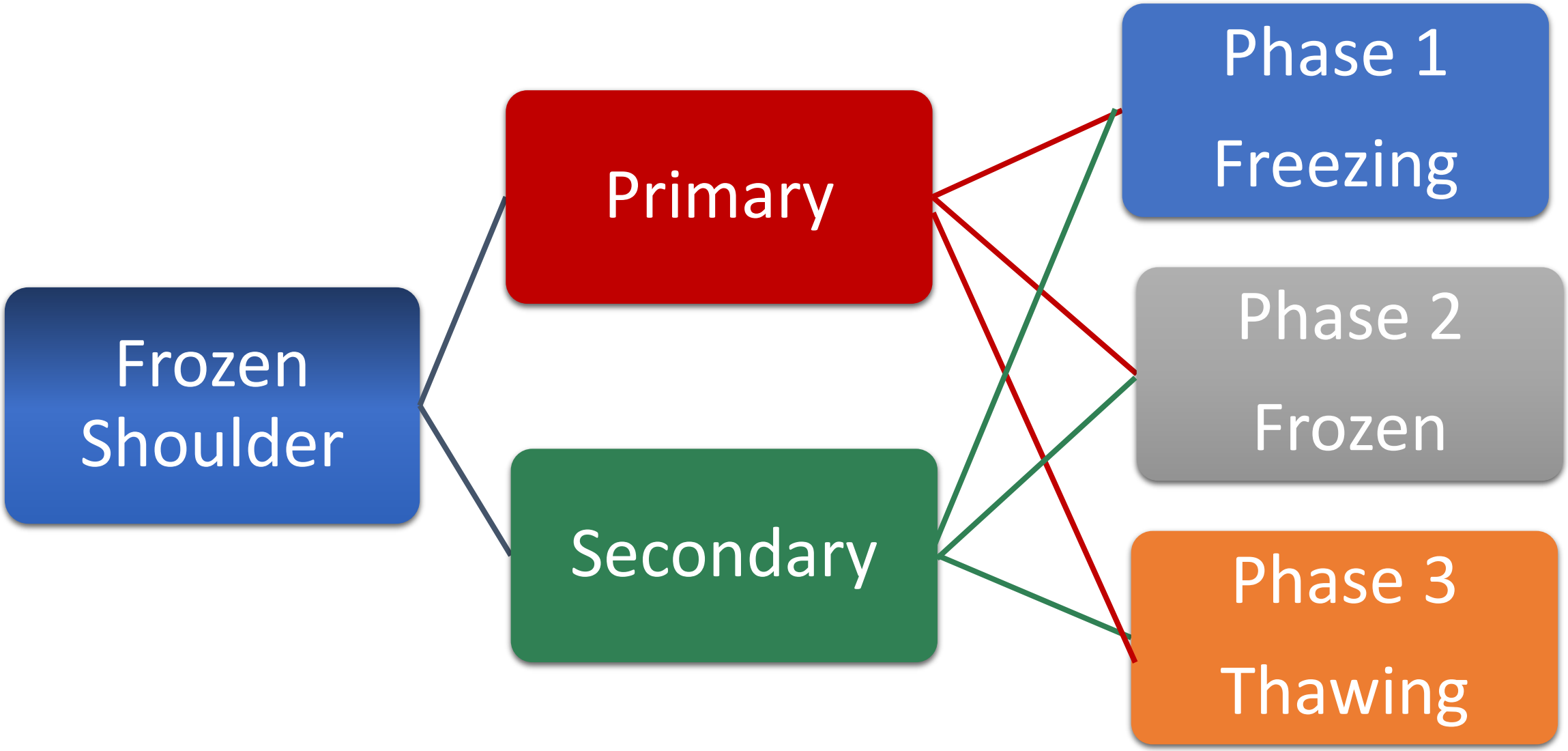
The American Academy of Orthopaedic Surgeons: “a condition of varying severity characterized by the gradual development of global limitation of active and passive shoulder motion where radiographic findings other than osteopenia are absent."

Medicine.net: “Permanent severe limitation of the range of motion of the shoulder due to inflammation and subsequent scarring around the shoulder joint (adhesive capsulitis).” [2]

GARBAGE CAN DIAGNOSIS

When you run out of diagnostic ideas, the patient gets thrown in a bin with other patients who have similarly stumped their doctors




Frozen Shoulder
Primary
Secondary
Phase 1 Freezing
Phase 2 Frozen
Phase 3 Thawing

Type 1: Primary Frozen Shoulder

Controversial.

- Specific causes not well understood.
- Possible causes include:
  - Changes in the immune system
  - Biochemical and hormonal imbalances.
  - Diseases such as diabetes mellitus (3 x higher risk)
  - Cardiovascular / neurological disorders may also be contributing factors.
  - May affect both shoulders (although this may not happen at the same time) and may be resistant to most forms of treatment..

Secondary Type 2

- Secondary (acquired) develops from a known cause, such as stiffness following a shoulder injury, surgery, or a prolonged period of immobilization.
- Clinically seen much more often
- Frequently mislabelled and mismanaged

The 3 Stages…

Freezing Stage:

- Pain increases gradually, making shoulder motion harder and harder.
- Pain tends to be worse at night.
- Pain is at rest
- Sharp pain at end range
- Can last from 6 weeks to 9 months.

Frozen Stage:

- Pain does not worsen, and it may decrease at this stage.
- Shoulder ROM significantly reduced in all ranges
- Pain just felt at end range
- It can last from 4 to 12 months

Thawing Stage:

- Movement gets easier and may eventually return to normal.
- Pain may fade but occasionally recur.
- This takes between 12 months to 3 years



HISTORY

The term ‘frozen shoulder’ was first used by Dr. Codman in 1934 in his book named “The Shoulder: Rupture of the Supraspinatus Tendon and other Lesser Lesions in or about the Subacromial Bursa” [3]

- He was the first to describe the classic diagnostic criteria for the condition, which included:

1. idiopathic etiology
2. global restriction in the range of movement of the shoulder
3. severe restriction of external rotation, painful at the outset
4. normal plain X-ray findings.

A sticking point…

- In 1945, Dr J. Neviasier, described “adhesive capsulitis” using the term ”adhesive” to describe the texture and integrity of the inflamed capsule, which he thought was similar to sticking plaster. [4]

- Nagy et al argued that frozen shoulder is not associated with adhesions of the capsule, but rather is related to **synovitis** and progressive **contracture** of the capsule. [5]

In other words, the concept is the joint has been “shrink wrapped” by a joint capsule that has tightened, rather than surrounded by loose layers of joint capsule that have gotten stuck together.





Why care about the label?

- This difference is important to treatment.
- Adhered sticky layers can be pulled apart
- True contracture is an issue that's a little trickier to treat.
- The main problem with the theory is the lack of information regarding adhesion versus contracture.
- The ideas seemed to have originated with a couple papers back in 1989[6] and 1995[7] with little other comment from other researchers, except notably Dr. Bunker in 2010, who clearly on sides on the contracture belief.

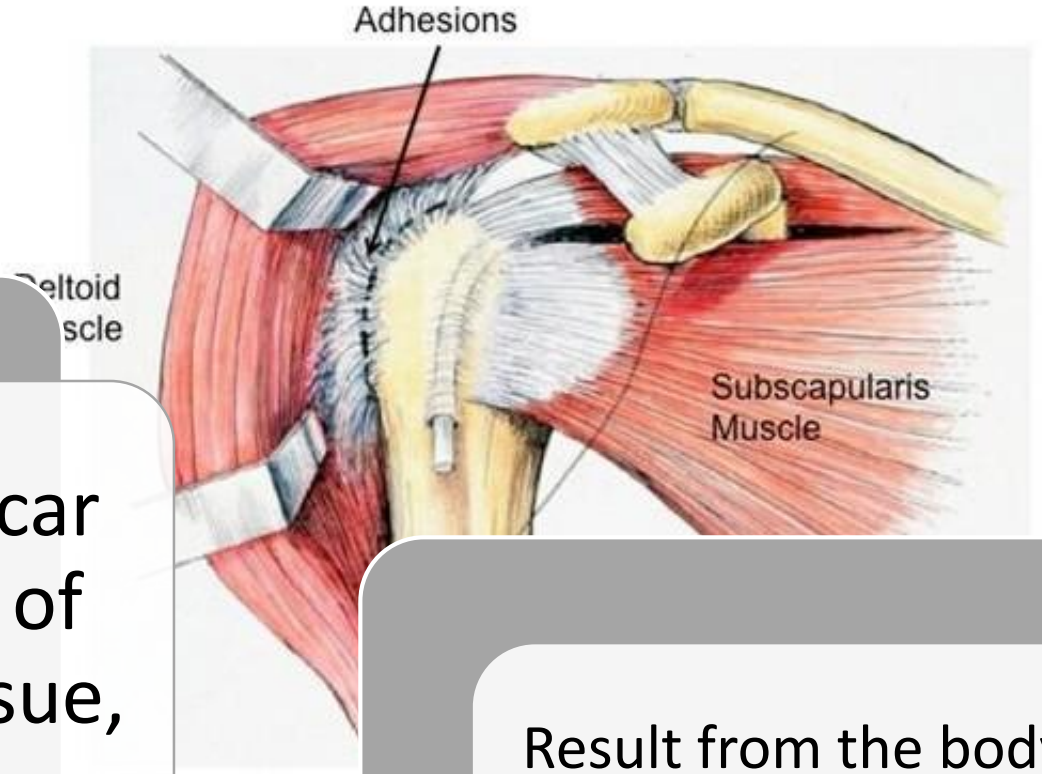
Contracture



Contractures are shortenings of muscle, connective tissue, tendons, ligaments, or skin.

A contracture develops when normally elastic connective tissue become replaced with inelastic fibrous tissue. [8]

Adhesion



Dense collections of scar tissue found in layers of muscle, connective tissue, tendons, ligaments, or skin.

Result from the body's self-healing mechanisms. Even small, micro-injuries can cause adhesions. When muscles and other tissues are under stress, our body fixes them by laying down scar tissue which is strong and supportive.



ASSESSING THE UNMEASURABLE

Some (many, most) of frozen shoulder referrals…

Will end up as…

- Labral tears
- Supraspinatus impingement
- Subscapularis adhesions
- Pec Minor splinting
- Neural weakness causing poor scapulohumeral rhythm

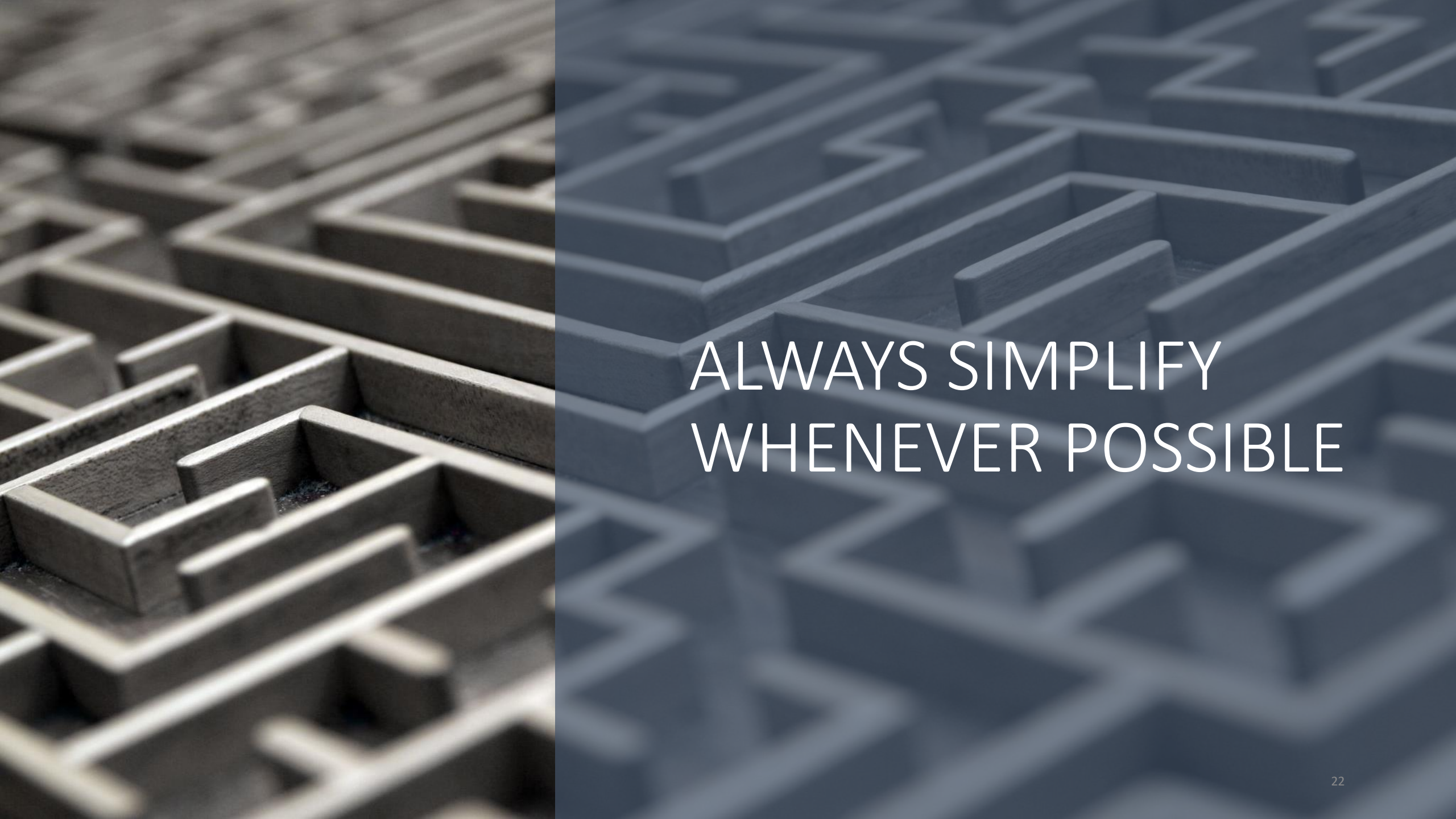
What you will hear



- “I can’t sleep on my XXX side”
- “I can’t reach back and put on my coat”
- “I can’t fasten my bra”
- “I can’t reach back to get the seatbelt.”
- “I can’t wipe my bum”

Review

1. Unclear etiology
2. Potential types of disease
3. Stages of unclear condition



ALWAYS SIMPLIFY WHENEVER POSSIBLE

History

To understand where you are today, you must go back and learn about the onset.

Type 1 vs Type 2

Maybe this isn't as important to other therapists, but in the FSM world its crucial.

Disease vs Musculoskeletal

Primary (Type 1) “Disease” Component

- Usually seen with or brought on by changes in:
  - Immune system
  - Biochemical imbalances
  - Hormonal imbalances
  - Diabetes mellitus
  - Cardiovascular disorders
  - Neurological disorders

- Not to forget: The association between frozen shoulder and Dupuytren's disease [9]
  - 58 patients with the diagnosis of primary frozen shoulder were independently examined by 3 surgeons for evidence of Dupuytren's disease.
  - The disease was found in 52% (30/58) of the patients reviewed. These figures were compared with previously reported figures for a population of similar age.



Dupuytren's Contracture

- Cause is not completely well known.
- Most evidence points towards a genetic role
- Anecdotal reports emerging after injury or open wound to the hand
- Risk factors:
  - Gender (more men than women)
  - Ancestry (common in Northern European decent (English, Irish, Scottish, French, and Dutch) and Scandinavian (Swedish, Norwegian, and Finnish)
- Hereditary: often runs in families
- Common in middle aged adults
- Alcohol use increases risk
- Certain medical conditions (diabetes and seizure disorders)

Treating Primary Type 1

- Once you have a clear path to the cause/ onset of your Frozen Shoulder, you can develop the protocols that MUST be done first. These will include:

  - Viral: Frequencies: Shingles, Other??
  - Emotional Factors: Concussion, PTSD?
  - Autoimmune: Immune Support, Thyroid? Hormonal?
  - Diabetes: Custom Care (PN Diabetes)

Secondary Type 2 Musculoskeletal



Seen with Injury and / or Immobility from lifestyle, sports or ADLs



Confirm if the condition is “Frozen Shoulder” or muscular imbalance!



Rely on intake, history, assessment.



Usually much easier to treat and maintain results as your stable state is usually healthier.

ROM ASSESSMENT

- Remember we really are looking at 2 separate mechanical areas:

- A. Glenohumeral joint
- B. Scapulothoracic articulation

- Should always be treated as 2 separate dysfunctions
- Remember 3:1

GH & Scap ROM

GH:

FLEXION
EXTENSION
ABDUCTION
HORIZONTAL ABDUCTION:
- With palms up: isolates pec mjr b/c the ant delt flexes over the grt tubercle so it doesn't stretch.
- With palms down: isolates ant delt as it stretches it across the joint

HORIZONTAL ADDUCTION: do 2 times, each arm on top (watching protraction)
External rotation: abd 90`, hor add 30` (lose pack the AC)
Internal rotation: abd 90`, hor add 30` (watch scap's ant. Tilt)

SCAP:

Elevation
Depression
Protraction
Retraction
Upward rotation
Downward rotation
Anterior tilt (grasshopper)

Assess Assess Assess….

Do your own ROM assessment to identify if you have a:

1. Tightness in the antagonist
2. Weakness in the agonist
3. Joint pathology (crepitus, end feel…)

Determine, based on YOUR findings, where to go now….



Let’s Talk Numbers….

The 3 Stages… In both Types

Freezing Stage:

- Pain!!
- Treat the Nerve /396
- Treat Nervous System (Concussion, Emotional Frequencies, PTSD?)

Frozen Stage:

- Mobility!!
- Focus on freeing up the ROM with removing the disease, scarring, (13, 51, ..)
- Treat the tissue more aggressively

Thawing Stage:

- Movement!!!
- Increase the ROM by using 81,49 /
- Promote Ex Rehab with neuro repatterning

Primary Type 1
FSM A Channels

Removing the Pathology:

- 230 / 430
- 236 / 435 - Shingles Virus
- 687 / 573

- 61 / - Infection, "Parasite", Virus
- 94,321,9 / - the Basics
- 160 / - malignant virus
- 57 / - general toxins
- 900, 920 / - organic toxins
- *55 (Lyme), *23,95,154, (Mold),
- …???
- 81, 49 / Increasing the secretions and Vitality

Secondary Type 2
FSM A Channels

Removing the Pathology:

- 294, 321,9 / - The Basics (Trauma, Paralysis, Allergy)
- 51 / - FIBROSIS
- 13 / - ADHESION
- 91 / - Hardening CA+ Deposits
- 766, 276, 242 / - Mineral Deposits
- 124* / Torn and Broken
- 880 / 7.4 Hypoxia

- 81, 49 / Increasing the secretions and Vitality

All Types B Channels
The Relevant Tissues:

- / 396 - Nerve
- / 480 - Joint Capsule
- / 77 - Connective Tissue
- / 142 - Fascia Sheath
- / 62, 46 - Muscle
- / 100 - Ligaments
- / 191 - Tendons
- / 97 - Adipose
- / 783 - Periosteum

Also to Consider for Type 1:

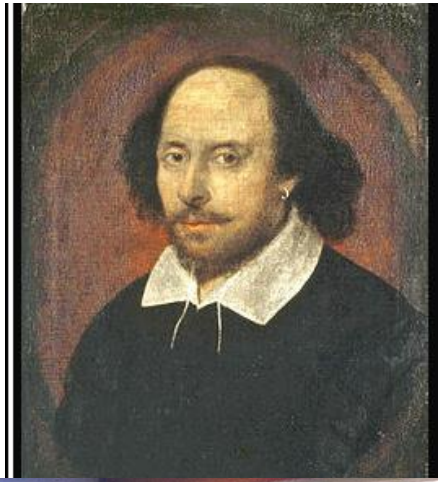
- / 98 - Thyroid
- / 116 - Immune System

- Cardiovascular component / 33
- Neurological component and / or Concussion protocol





Anterior / Supine treatment



What's in a name? That which we call a rose By any other word would smell as sweet.

(William Shakespeare)

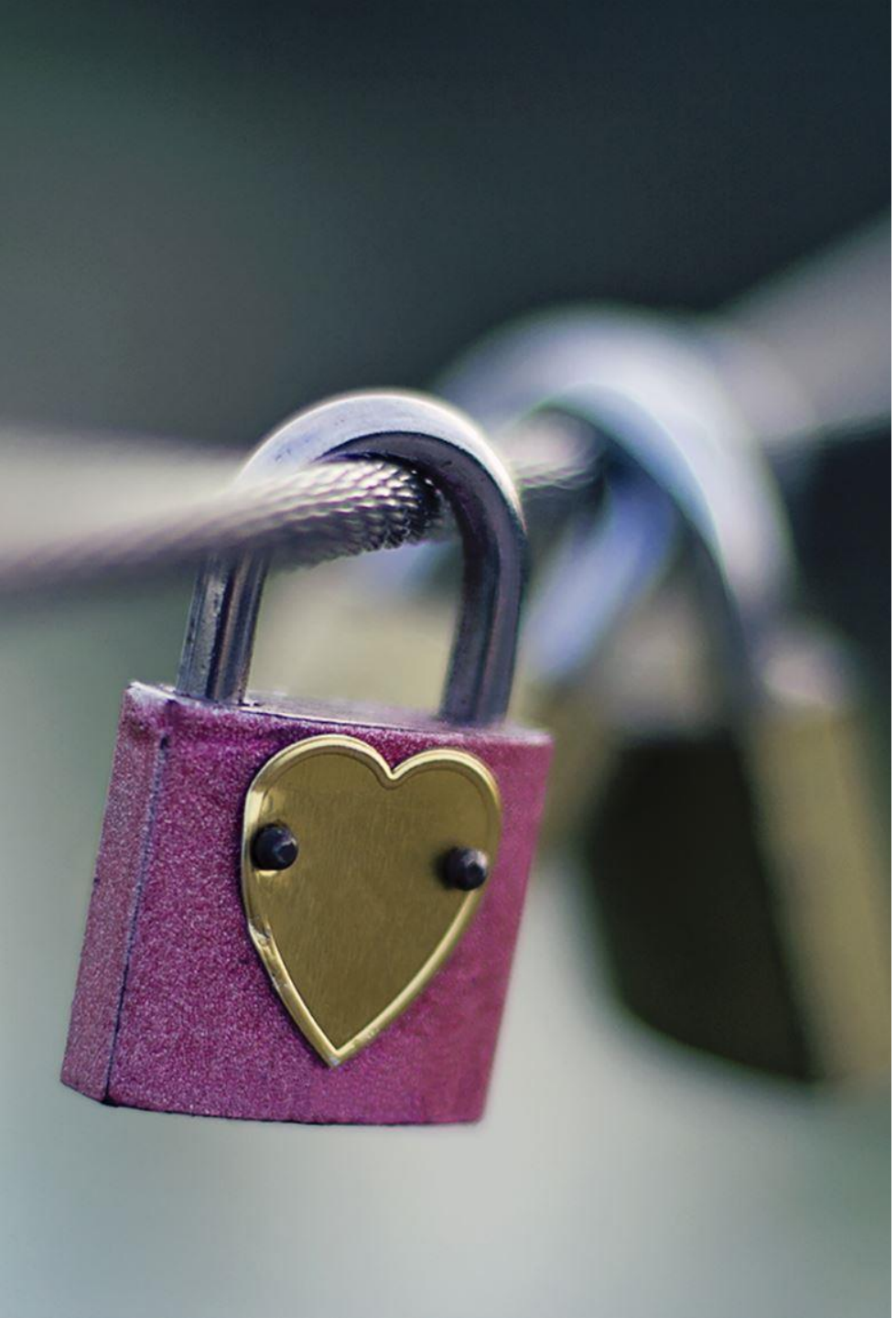


Contracture (shrink wrapped)

VS

Adhesions (plaster layers)





13 /

- Best resonates with the ADHESION itself
- We love 13 / 77 just like we love 3 / 97
- If you believe the **adhesions** are in the connective tissue, this is your A channel

51 /

- Resonates with Fibrosis
- If you believe the restriction is caused from contracture, or hardening, this is your go-to: 51 / 480



Remember your FSM thought process:

What is wrong?? And where is it happening??

Contracture Or Adhesion??

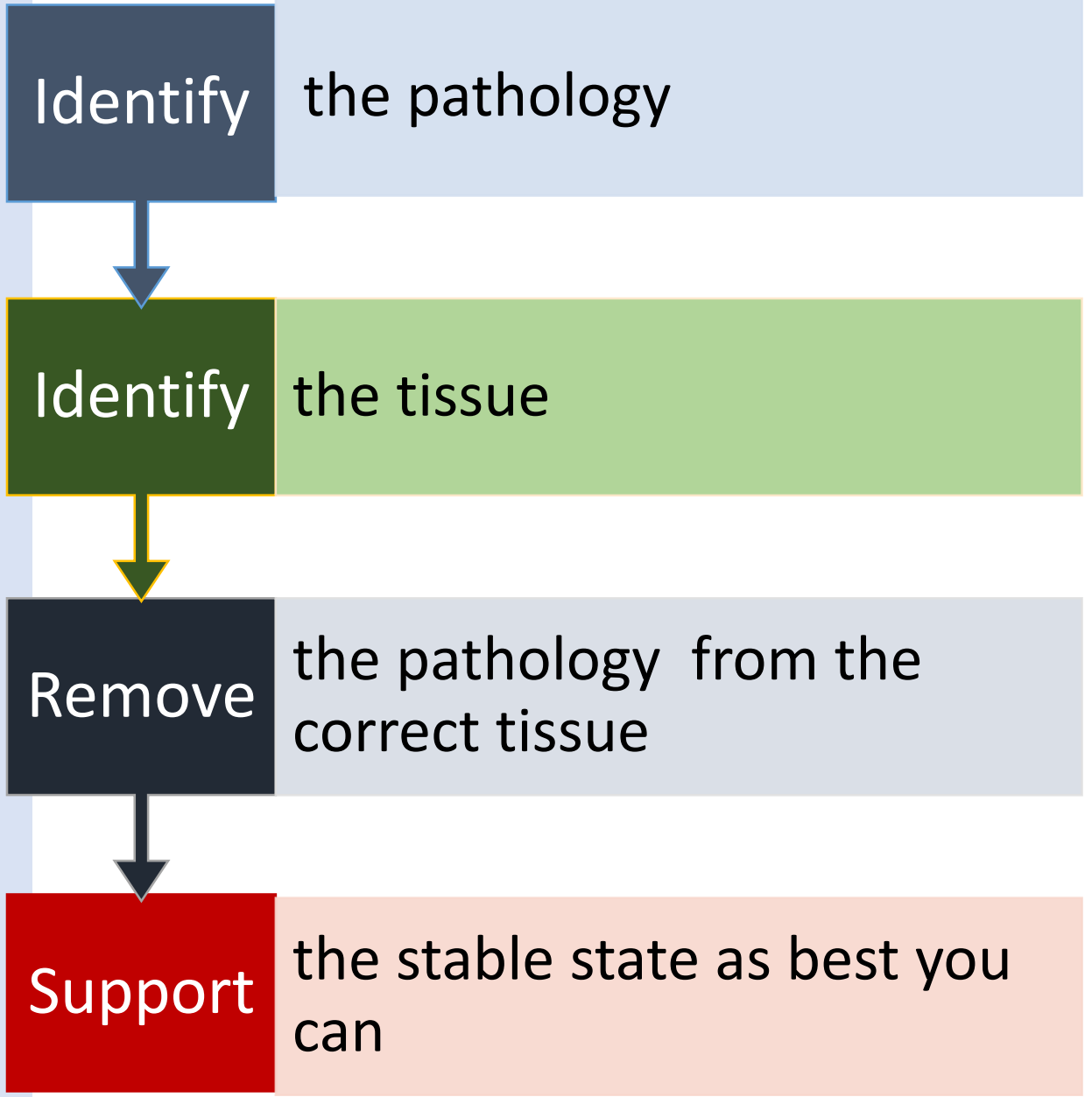
This will dictate if you should use

13 VS 51



Case Study…

As always, FSM is ONLY successful if you follow the steps…



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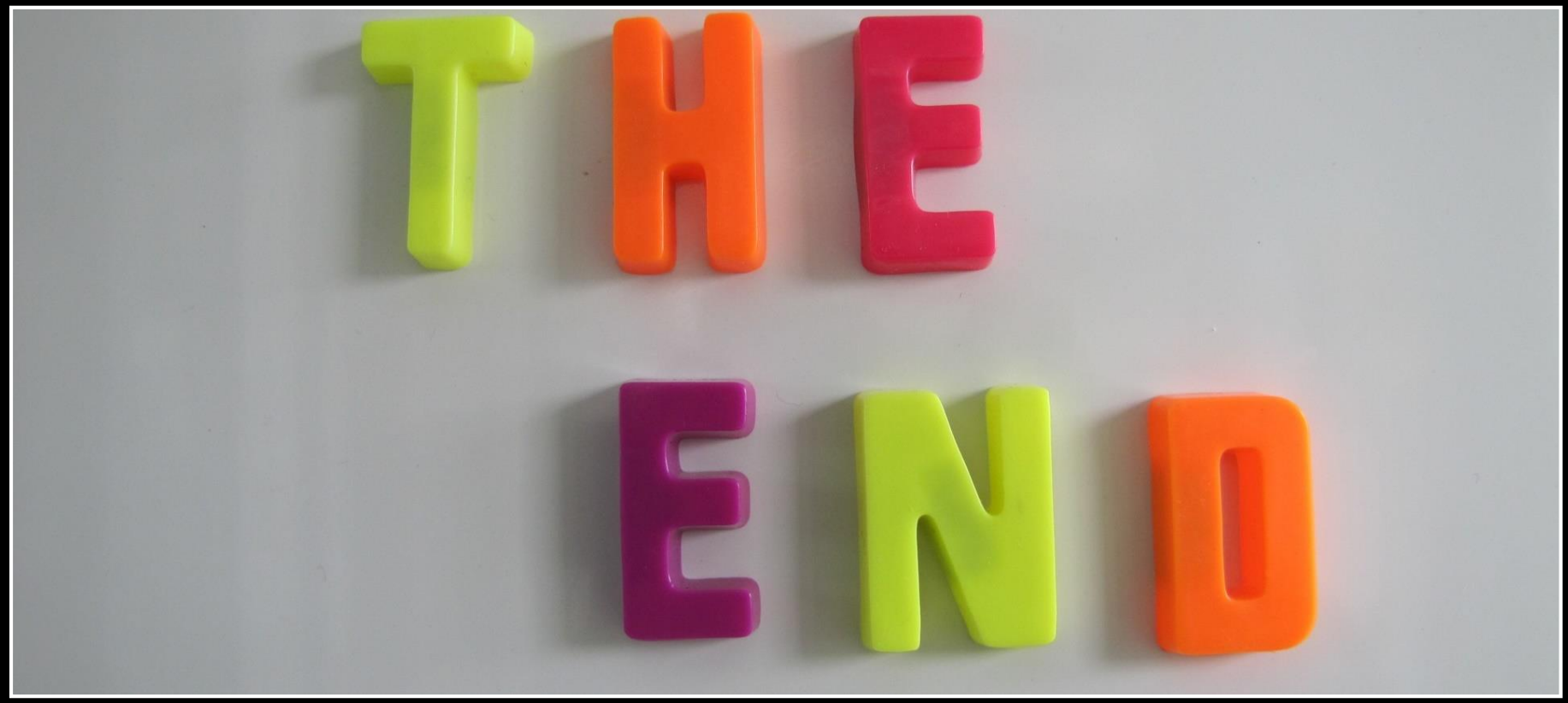
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