A Breakthrough Aquatic Therapy for Frozen Shoulder Syndrome

CSM 2014
Platform: Aquatic Physical Therapy
Las Vegas, NV
February 5, 2014
Physical Therapy AquaStretch™ Demand

- New Markets:
  - Wellness
  - Pre-surgical
  - Non-trauma chronic pain
  - (i.e. fibromyalgia, Frozen Shoulder)
  - 100/400 last new referrals

“AquaStretch™ is a major breakthrough in pain management”
F. Fuller Royal M.D.
Medical Director, Nevada Clinic

“...significant arthritic conditions... not responsive to usual therapy...[A/S] able to relieve sharp burning radicular pain down my arms ...I was impressed and actually astonished that your therapy could result in this significant improvement.”
--Glenn Nudleman M.D.
Midwest Internal Medicine LHC, AZ

80% less painful!

2x more effective at restoring flexibility
Manual Aquatic Therapy
AquaStretch™

Intuitive Movement & Accenting

Aquatic Therapy

Manual Therapy
(MFR, SCS, Mobs)

Immediate reduces chronic aches and pains > 60% in 1st Session!

Stretch (Static/Dynamic)

Creates Profound Relaxation
Reduces muscle tension
Reduces post exercise soreness
What is AquaStretch™?
Case Study History

- 49 y.o. Male; R Frozen Shoulder referred to AquaStretch™ by friends & personal Trainer
- Insidious onset  8/2011
- PMH: Type I diabetes
- Main complaint: Cannot throw a ball with his son
Case Study History

Initial AquaStretch™ Visit  4/19/2013

- R Shoulder ROM Measurements
  - Shoulder Flex  = 160°
  - Shoulder Abd  = 150°
  - Shoulder ER   =  55°
  - Shoulder IR   =  R iliac, Mid sacrum
Previous Medical Intervention

- Insidious Onset 8/2011
- Cortisone Injection (x2)
  - 5/2012 & 11/2012
- Traditional Land and Aquatic PT
  - 7/2012-2/2013
    - 1-2x/week for 7 months
- Pain narcotics
  - 1 mo.
- NSAIDS
  - PRN
Previous Medical Intervention

Results

% Perceived Improvement

Cortisone Injection  "10%"

Traditional Land and Aquatic PT  *"15%"

*All perceived gains lost with 2 mo. tx inactivity (before 1\textsuperscript{st} A/S Wellness visit)
Case Study: AquaStretch™ (A/S) Intervention

Initial AquaStretch™ Visit  4/19/2013

- SPADI  45% Pain  60% Disability  Total Score  53%
- Shoulder Pain Score  18/28
- A/S Intervention
  - 2-3x/week for 4 weeks
  - Total A/S visits = 9
Case Study: AquaStretch™ (A/S) Outcomes

Initial AquaStretch™ Visit: 4/19/2013

3rd Visit 4/26
- Upon arrival: ER 65°
- After (30’) session: ER 79°
- Reports: 85% improved

4th-9th Visit
- Emphasis on last residual ER discomfort

5/8/13 (6th visit)
- IR resolved; T12
- Very pleased with ability to throw ball

5/17/13 (9th visit) Last Session!
- Demonstrated Full ROM; No c/o pain
Case Study:
AquaStretch™ Discussion

Insidious Onset 8/2011
A/S Intervention: 4/19/2013-5/17/13

5/17/13 SPADI score: 0 pain 0 disability
Shoulder Pain Score 7 “Cured”

*100% Resolution of symptoms after the 9th session!
Less than 1 month

Total Cost for 9 (30’) A/S Wellness Visits
$40/visit X 9 Visits = $360
4.5 total hours of our time
1.5 year history chronic pain resolved
AquaStretch™ appears to be clinically significant for approximately 60% of the total rehab population to restore flexibility and reduce chronic pain.

Jessica Huss, PT, DPT, CCI
AquaStretch Instructor
Aquatic Rehab & Wellness Center
Lake Havasu City, AZ
AquaStretch™ Research Opportunities

1. **Health Cost Savings Studies**
   - Less office visits, Prescriptions for pain/sleep meds
   - Physical medicine services, Radiology (MRI), Postpone surgeries

2. **Comparative Effectiveness (i.e., PCORI)**
   - Low Back Pain, Fibromyalgia, Idiopathic pain, Pre-surgical

3. **Sports Performance**
   - Faster rehab from minor injuries, less muscle soreness,
     restore flexibility lost from prior injuries, surgeries, or over-training
   - Motivation for unfit people to start and maintain new exercise programs

4. **Fascial Adhesion Theory**
   - Excessive calcifications in fascia may restrict motion and
     may cause nerve impingement pain.
AquaStretch™: Research Opportunities

Chronic Pain Relief Studies

Idiopathic Pain

60-80% Less Pain with only 1-2 A/S sessions

Eliminate extreme fascial restrictions in 4-6 sessions (i.e., Frozen shoulder)

Maintain pain reductions with A/S every 4-8 weeks

Lower Back Pain

Fibromyalgia
AquaStretch™ Research Opportunities

Fascial Adhesion Theory: Why A/S Works

1. Ultrasound or MRI: Fibromyalgia Patients
   - ~100 at my practice, almost 50 at UNLV
   - A/S one arm/leg, re-image both arms/legs
   - Compare calcium density and correlate with patient pain changes

2. Ultrasound or MRI: IT Bands and/or injured ankles
   - Pre/post A/S calcium density and goniometer tests
AquaStretch™: Research Opportunities

Fitness & Sports Performance Studies

AquaStretch Fitness Benefits

- Restore flexibility lost from prior injuries/surgeries
- Decrease Muscle Soreness from intensive training
- Compress training with faster recovery
- Help “Get Loose” before competitions
- Motivate Unfit People to start and maintain exercise
- Relieve pre-existing chronic pain and reduce muscle soreness

Lori Sherlock: Assistant Professor, WVU School of Medicine
- 35 “uninjured” subjects had increases in average flexibility of all lower extremities tested, 4 statistically significant
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Questions?

Jessica Huss, DPT, CCI
VP Education; Aquatics Section, APTA
AquaStretch Instructor