PHYSICAL THERAPY AND WOUND CARE:
Not An Oxymoron
Disclosures

Key Opinion Leader: Urgo Medical
HISTORY

❖ 1917: WORLD WAR I
❖ BRITISH AND AMERICAN ARMIES
  • RECONSTRUCTION AIDES
❖ PHYSICAL THERAPY ROLES:
  • HYDORTHERAPY
  • ELECTROTHERAPY
  • MECHANOThERAPY
  • ACTIVE EXERCISE
  • INDOOR AND OUTDOOR GAMES
  • MASSAGE
# Physical Therapy Practices

**Past**

- Hydrotherapy
- Electrophoresis
- Mechanical therapy
- Indoor/Outdoor games
- Massage

**Present**

- Conservative sharp debridement
- Gait/Balance
- Therapeutic Exercise
- Electrical Stimulation
- Ultrasound
- Dressing Management
- Orthotic
- Assistive Devices
- Patient Education
- Compression Wrapping
- Total Contact Casting
- Ultraviolet Therapy
- Monochromatic Infrared Energy
- Scar Management/Massage
- Mobility: Functional Training
- Seating Positioning
- Contractures/Sensation
WHAT ARE WE??

Physical Therapists...”are healthcare professionals who maintain, restore, and improve movement, activity and health, enabling individuals of all ages to have optimal functioning and quality of life. “
According to the American Physical Therapy Association’s (APTA’s) Guide to Physical Therapist Practice:

...the PT provides “application of therapeutic procedures and modalities that are intended to enhance...

• wound perfusion
• manage scar
• promote an optimal wound environment
• remove excess exudate from a wound complex
• eliminate nonviable tissue from a wound bed...
Procedures and modalities may include: sharp debridement; dressings; orthotic, protective, and supportive devices; physical agents and mechanical and electrotherapeutic modalities; and topical agents.”

BUT THAT IS NOT ALL WE DO!!!
<table>
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<th>WHAT WE DO.....DO</th>
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<td>SCAR MANAGEMENT/MASSAGE</td>
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BESIDES “WOUND CARE”

GAIT

PATIENT EDUCATION

BALANCE

CONSERVATIVE SHARP DEBRIDEMENT

THERAPEUTIC EXERCISE

SEATING POSITIONING

DRESSING MANAGEMENT

CONTRACTURE MANAGEMENT

ORTHOTICS

MODALITIES

ASSISTIVE DEVICES

COMPRESSION THERAPY

SCAR MANAGEMENT/MASSAGE

TOTAL CONTACT CASTING

MOBILITY: FUNCTIONAL TRAINING

LYMPHEDEMA MANAGEMENT
WHY WOULD A WOUND PATIENT NEED PT?

Functional Limitations:

1. Reduction in strength/ROM
2. Needs an assistive device to be safe
3. Can’t transfer safely
4. Edema

5. Has a TCC

6. Poorly accountable

7. Needs compression hose

8. Needs orthotics

9. Needs pressure relief ......................... ETC
BRIDGE THE GAP!!

Recognize outliers
Embrace the TEAM
Focus on outcomes for the patient
Fine the value in improving mobility/function
DIABETIC FOOT ULCER

WOUND CLINIC
PHYSICIAN PROVIDER:
✓ ESTABLISH PLAN OF CARE
✓ SHARP DEBRIDEMENT
✓ TCC APPLICATION
✓ TISSUE/ADVANCED TREATMENT
NURSE:
✓ IMPLEMENT TREATMENT PER PROVIDER
✓ DRESSINGS
✓ PATIENT EDUCATION

PHYSICAL THERAPY DEPARTMENT
✓ GAIT
✓ SAFE FUNCTIONAL MOBILITY
✓ ORTHOTIC/CUSTOM SHOE FIT
✓ EDEMA MANAGEMENT
✓ THERAPEUTIC EXERCISE
✓ BALANCE
✓ PATIENT EDUCATION
✓ ASSISTIVE DEVICES
✓ TOTAL CONTACT CASTING
To advance the care of people with and at risk for wounds.
Safe ambulation

Balance
Assistive device management
Shoe gear
Efficient functional movement
VENOUS ULCER

WOUND CLINIC
PHYSICIAN PROVIDER:
✓ ESTABLISH PLAN OF CARE
✓ DEBRIDEMENT
✓ TISSUE/ADVANCED THERAPIES
✓ DIAGNOSTICS/INTERVENTIONS

NURSE:
✓ IMPLEMENT TREATMENT PER PROVIDER
✓ COMPRESSION THERAPY
✓ PATIENT EDUCATION

PHYSICAL THERAPY DEPARTMENT
✓ THERAPEUTIC EXERCISE
✓ GAIT TRAINING
✓ COMPRESSION MANAGEMENT
✓ FUNCTIONAL ACTIVITY INDEPENDENCE
✓ EXTREME ELEVATION
✓ HOME EXERCISE PROGRAM
✓ ENDURANCE
✓ LYMPHEDEMA
ABNORMAL GAIT

➢ POOR POSTURE
➢ SLOWER GAIT
➢ SHORTER STEP AND STRIDE LENGTHS
➢ LONGER STANCE PHASE
➢ WIDER BASE OF SUPPORT
➢ DECREASED MOBILITY AND STRENGTH
➢ IMPAIRED STATIC AND BALANCE
➢ ABNORMAL PLANTAR PRESSURES


“AN UNSUPERVISED RANGE OF MOTION EXERCISE PROGRAM CAN SIGNIFICANTLY REDUCE PEAK PLANTAR PRESSURE IN DIABETIC SUBJECTS WITH IN A RELATIVELY SHORT PERIOD OF TIME.”

Goldsmith, JR; The effects of Range of Motion therapy on the plantar pressure of patient with diabetes mellitus; J Am Podiatr Med Assoc. 2002 Oct;92(9):483-90
BENEFITS OF EXERCISE

➢ GAIT TRAINING
   Improve/Modify the Gait Cycle

➢ STRENGTHENING
   Improve Calf Pump
   Improve Hip strength

➢ STRETCHING
   -IMPROVE ANKLE RANGE OF MOTION AND STRENGTH

WOUND HEALING BENEFITS OF EXERCISE

➢ EXERCISE EFFECTS THE INFLAMMATORY PHASE
   - inhibits the expression of pro-inflammatory factors and increases the expression of anti-inflammatory factors

➢ EXERCISE IMPROVES TISSUE OXYGENATION

Mahoney, E: Incorporating Exercise as an Integral Part of Wound Management; Todays wound Clinic; Volume 8 Issue 5 - June/July 2014
CHALLENGES

✓ STAFFING/REFERRING
✓ REIMBURSEMENT
✓ CLINIC SET UP
✓ PHYSICAL THERAPIST INTEREST
“Insanity is doing the same thing over and over again and expecting different results.”
- Albert Einstein

CURRENT REOCCURRANCE RATES

DFU: From 1-3 years: 40%-65%
CVI ulcer: 63-79%
THANK YOU

We Believe
BIBLIOGRAPHY

1. AVILES, Frank Jr.; Examining the Increased Role of the Physical Therapist Within the Wound Care Industry; Today's Wound Clinic, May 2014, Vol 8 issue 4.


3. Mahoney, E: Incorporating Exercise as an Integral Part of Wound Management; Todays wound Clinic; Volume 8 Issue 5 - June/July 2014


