



**Pallavi Ravi  
Dhandore**

LTMMC and General  
Hospital, India

**Biography**

**Pallavi Ravi Dhandore**, has completed master's in physical therapy (M.Sc. PT) from LTMG medical college, Mumbai University, India in the year 1997-1999. She has done DPT from Montana University, USA in December 2024. She has been working as a Senior Clinical Physical Therapist in LTMG Hospital, Sion, India for 25 years.

**Tissue-Specific Sequential Thermal Therapy: A Conceptual Framework For Physical Therapy Intervention**

**Abstract:**

In day-to-day physical therapy practice we see varieties of musculoskeletal cases like Cervical spondylosis, degenerative joint arthritis, tendon pathologies etc. There are many reasons for periarticular pain especially resulting from muscle overuse, overload. Sustained muscle spasm is frequently encountered in physical therapy practice. Thermal modalities such as heat therapy and cryotherapy are commonly used for symptom management; however, they are often applied uniformly across regions without consideration of tissue-specific structural and vascular characteristics. This paper presents a theoretical, hypothesis-generating conceptual framework proposing a sequential and region-specific thermal intervention, in which moist heat is applied around the muscle belly to facilitate muscle relaxation and circulation, followed by cryotherapy applied to tendinous insertions around joints to reduce inflammation. This sequential thermal application is based on physiological differences between muscle and tendon tissues, their vascular responses to thermal agents, and mechanism of pain modulation. This is useful for physical therapist in clinical decision making while treating musculoskeletal conditions.