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Complex made Simple...clinically relevant education by Judy C. Colditz, OT/L, CHT, FAOTA

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ClinicalPearls

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TISSUE MATURITY

SEEING PATIENTS FOR A SHORT TIME

In our current US health care system, the number of therapy visits and the time span allowed for the allotted visits is often restricted. These limitations prevent us as therapists from seeing the final results of our patient treatment. This is especially frustrating with those patients who have had severe soft tissue injuries. I recall a study by Noyes[1], who evaluated the strength of immobilized monkey knee ligaments. It took 5 months for full motion to return and a full year before full ligament strength was regained.

The question evolves: If we are not able to follow our patients for long periods of time, how do we define the potential for final result?

My advice to therapists (especially those starting in practice) is to ask the patient to return in one year's time to the clinic for a brief social visit to allow you just to see and examine their hand. The inexperienced therapist will gain significant insight into the benefits of time: the tissue mobility and range of motion will be considerably improved as compared to the discharge date.

HOW TO RECOGNIZE TISSUE MATURITY

The related question becomes: How do we know an injured hand has reached tissue maturity? Although far from scientific, I find it helpful to close my eyes and manually palpate first the uninjured hand and then the injured hand. This manual examination defines any remaining difference in tissue quality. I am looking for tissue mobility, pliability, and texture; all subtle but important components of tissue maturity.

Someone a long time ago (if I could remember who, I would gladly give credit) suggested that a test for tissue maturity is to pinch the dorsal skin

On normal (mature) tissue, pinched skin over the PIP joint will retain the pinched shape for a considerable time.

longitudinally over the PIP joint. In the normal uninjured finger the pinched skin (if the joint is kept straight) will retain the pinched position for a considerable time. Try it! Immature tissue will not easily be pinched nor will it retain the pinched shape as long. It would be interesting to see if your observations of tissue maturity correlate with the pinched skin retention.

1. Noyes FR. Functional properties of knee ligaments and alterations induced by immobilization. Clinical Orthopaedics and Related Research 1977;123:210-241.