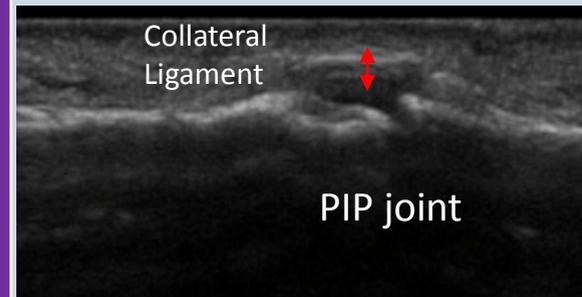


Introduction

- The proximal interphalangeal joint of the finger is swollen either on one or both sides when the joint is sprained.
- The cause of this swelling is not known anatomically.
- We studied the collateral ligaments with ultrasonography to determine if the collateral ligaments are enlarged in thickness.

Figure 1



Results

- Collateral ligaments of proximal interphalangeal joint of injured digit were twice as thick as the contralateral unaffected healthy collateral ligament.
- We found wide range of thickness of collateral ligament of proximal interphalangeal joint in healthy digits which can be as thin as 0.6 mm to 1.7 mm with average thickness being 0.8 mm.
- Average thickness of injured collateral ligament after sprain of the joint was 2 mm (range 1.1 mm to 2.6 mm)

Conclusion

- Comparison of collateral ligament thickness of injured and contralateral healthy digit is useful when looking for collateral ligament injury of proximal interphalangeal joint after sprain of the joint using ultrasonography.
- We established a normal range of thickness of healthy collateral ligament using ultrasonography for comparison.
- The range of thickness of normal collateral ligament overlaps with range of thickness measurement of the abnormal collateral ligament, it is the comparison with the contralateral healthy collateral ligament that is more useful

Material & Methods

- 32 cases of proximal interphalangeal joint sprain were examined with ultrasound and collateral ligament thickness was measured and compared to contralateral healthy collateral ligament.
- 111 healthy digits with no history of trauma or other pathology affecting the proximal interphalangeal joint were examined to measure the collateral ligament thickness.
- Exclusion criteria were presence of – rheumatoid arthritis, gout, Diabetes, infection of the digit and any injury/trauma to digit.