

# MCL Injuries of the Knee...

## “When I fix ‘em, when I don’t...”



Peter A Indelicato MD  
Emeritus Professor and Head Team Physician Sports Medicine  
Department of Orthopedics  
University of Florida



## Introduction

- My approach to this, like in many other things, has evolved over the past 30 years....



This presentation is the intellectual property of the author.  
Contact them for permission to reprint and/or distribute.

35 Years ago.....



Today



## Introduction

- When I don't repair an acute isolated complete tear of the MCL....
- When I do repair an acute isolated complete tear of the MCL....
- When I repair an acute combined MCL/ACL tear ....ACL/PCL...????
- When and how I reconstruct a chronic MCL tear....



This presentation is the intellectual property of the author.  
Contact them for permission to reprint and/or distribute.

## Diagnosis...History

- Blow to the lateral side of the knee.....



## Diagnosis...Physical Findings

- 2/3 + or more laxity with the knee in 30 deg of flexion **WITH SOFT ENDPOINT !!!**
- Minimal to no valgus laxity with the knee in full extension.....



## Key to an accurate knee exam?

- The patient absolutely needs to be completely relaxed....
- Sometimes that takes a gentle, reassuring examination...always compare to opposite knee....
- Sometimes that may even require an exam under anesthesia...BUT
- Every time....the quads and hamstrings need to be relaxed or else the degree of laxity will be masked...!!!!



## What's different about an MCL tear vs an ACL tear ???

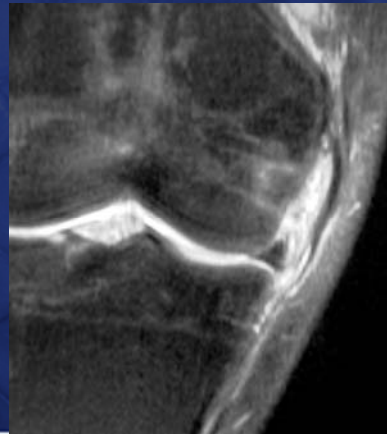
- Answer: The surrounding soft tissue and blood supply promote physiological healing....
- Synovial fluid doesn't....!!!!



This presentation is the intellectual property of the author.  
Contact them for permission to reprint and/or distribute.

## When I don't surgically repair an Isolated complete tear of MCL of Knee?

- When it is just that...an **isolated** complete tear of the MCL
- Please note....Lab studies have shown that due to the parallel arrangements of the MCL fibers, anything more than a 4 mm difference compared to other side probably represents a complete rupture of MCL



## Why Not Repair It Then?

- (1) The ability of the MCL to heal spontaneously (surrounding soft tissue ) is much great compared to the ACL ( surrounding synovial fluid )
- (2) The knee is much more capable of dealing with a small residual amount of medial laxity than ACL laxity ( possibly due to the synergistic effect of hamstrings )...



## WHEN DO I SURGICALLY REPAIR AN ISOLATED COMPLETE TEAR OF THE MCL OF THE KNEE?

Occasionally in a large patient( offensive  
lineman ) with a significant valgus  
alignment of the leg



## What about combined MCL/ACL ?

- LOCATION, LOCATION, LOCATION !!!

Where is MCL  
torn..?  
Proximal vs  
distal...???



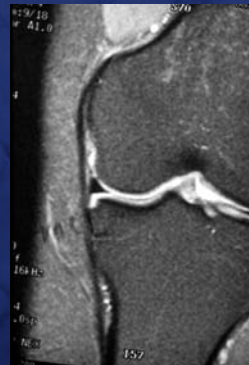
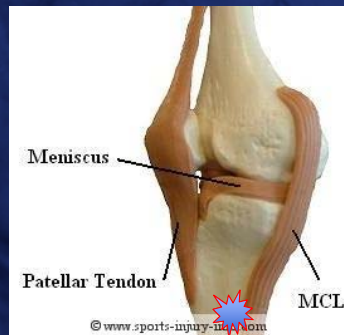
## HOW DO I MANAGE A COMBINED MCL/ACL WITH A **PROXIMAL** OR MID- SUBSTANCE MCL TEAR ?

I treat the MCL with protected early motion ( cast brace ) for 6 – 8 weeks, recover motion and strength in involved leg and then electively schedule ACL reconstruction



## HOW DO I MANAGE AN ACUTE COMBINED MCL/ACL WITH A **DISTAL** MCL TEAR ?

I fix distal MCL tear thru same tibial incision used to make tibial drill hole...



This presentation is the intellectual property of the author.  
Contact them for permission to reprint and/or distribute.

## Please note:

- I prefer not to use a hamstring graft when dealing with a combined MCL/ACL due to the synergistic effect the hamstrings have on helping to dynamically stabilize the medial side of the knee.....



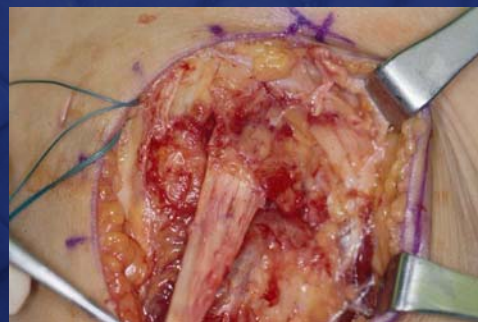
## WHEN DO I REPAIR A MCL WHEN COMBINED WITH PCL ?

**Almost always !!!!.....**

PCL...Arthroscopic



MCL Open



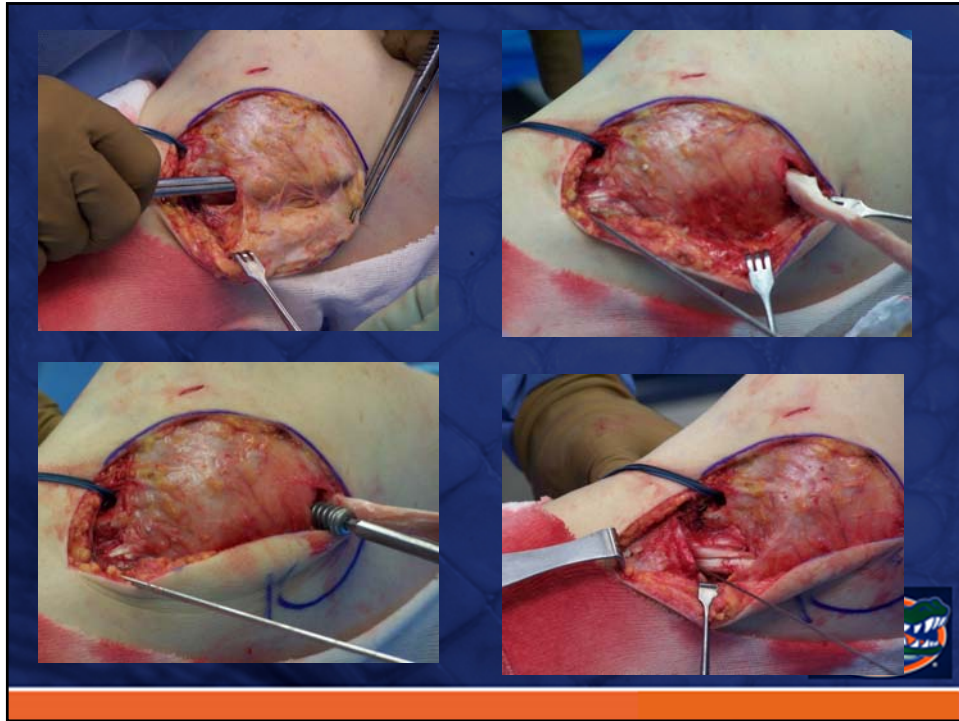
## MCL Repair vs Reconstruction

- When do I do a reconstruction ?
  - When injury is more than 6 – 8 weeks old
- How do I do it ?
  - I prefer to use an Achilles tendon allograft...I try not to sacrifice the medial hamstrings due to their synergistic dynamic effect on stabilizing the medial aspect of the knee....



## Graft Preparation....





## Take Home Messages

- Isolated MCL injuries have a high capacity for healing due to surrounding soft tissue...
- If seen in a large athlete with valgus knees, I still perform a primary repair ( even when it's isolated )...
- When combined with a proximal MCL tear, I stage the ACL reconstruction....
- When combined with a distal MCL and ACL injury, acute surgical repair maybe best....
- When combined with complete PCL, surgically fix both...
- If delayed more than 4 – 6 weeks, perform a MCL reconstruction using allograft tissue...( not hamstrings )



This presentation is the intellectual property of the author.  
Contact them for permission to reprint and/or distribute.

Thank you for your attention....



Indelicato, P.A>...."Non-Operative Management of MCL Tears of the Knee"  
JBJS. March 1983; 65 (3) 323



This presentation is the intellectual property of the author.  
Contact them for permission to reprint and/or distribute.