

# MENISCUS

## Functions

1. Articular conformity
2. Shock absorption (elastin)
3. AP stability
4. Lubrication / distrib<sup>n</sup> synovial fluid
5. Proprioception
6. Prevent soft tissue impingement

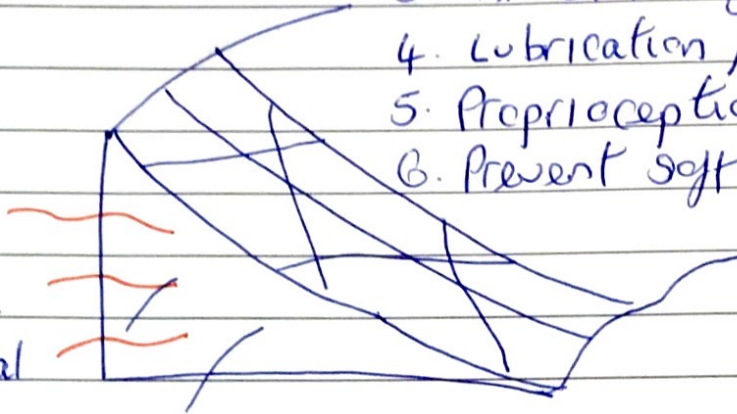
Superficial radial

Surface  
Superficial  
Random

PVP

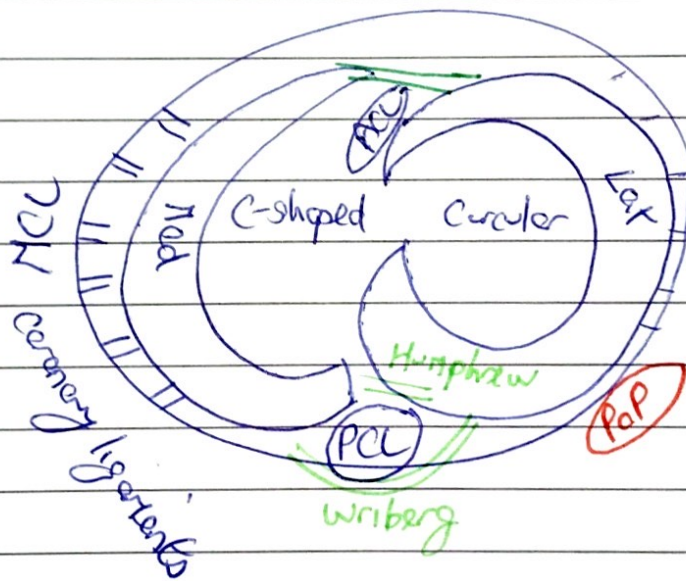
Deep

Circumferential  
& Radial



PVP = Perivascular capillary plexus

Intermeniscal ligament



## Histology

Water (70%)

90% type I

Non collagenous proteins

Elastin

Proteoglycans

Fibrochondrocytes

2 3 5 6  
(also II, III, V, ~~VI~~)

Hoop stresses = conversion of axial load into tensile strain  
through intact longitudinal (circumferential) collagen fib

Ext

~~85%~~ Flex

Load

50 - 70 %

85%

Contact area ↓ by 50% post meniscectomy



# MENISCAL TEARS

