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|       | 22 |
| ( : ) | :  |

, 7 - 6

(4)

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 .<sup>(4)</sup> ( posterior inclination ) 10

linae >

- : \_\_\_\_\_ - 1
- : \_\_\_\_\_ - 2
- : \_\_\_\_\_ <aspira - 3
- : \_\_\_\_\_ - 4
- : articularis genu - 5

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) ( ) : <sup>(4)</sup> Q \_\_\_\_\_  
 Q . 20-10 . (

: **Patellar retinacula**

4

(1)

(2)

- 1
- 2
- 3
- 4

Pes anserinus

Hamstring muscle

L<sub>3</sub> L<sub>4</sub>

L<sub>5</sub> S<sub>1</sub>

L<sub>2</sub> L<sub>3</sub> L<sub>4</sub>

<SOLEAL LINE >

5

gastrocnemius

5

soleus

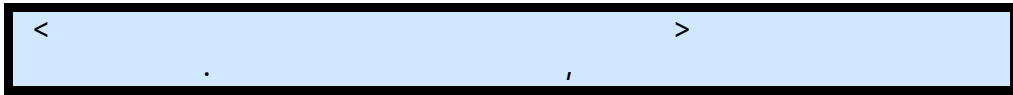
5

S<sub>1</sub> S<sub>2</sub>

4/3

(<sup>2</sup>Gredy )

6 ....



(4)

valgus \ varus

(3)

1.6

contact area

- 1
- 2
- 3

(<sup>2</sup><wheel on a dome >

gliding

<wheel to flat>  
rolling

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screw home

°30

(1)

°10 - °5

(1)

(1)

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(1)

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, valgus

: Pes anserinus

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<Quadruple complex>

: Medial quadruple •

: Lateral quadruple •

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7 : Medial Collateral Ligament

: -1

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: -2

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valgus

: Medial Collateral Ligament

8

varus

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Y

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<popliteofibular lig.>

9

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fabella

: Fabelofibular

: ACL

10

: PCL

11

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% 30 - 10 )

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( % 60 - 40 )

15

2.5 %40  
2 6

2 2

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ACL

:

( white zone , red - white zone , red zone )

3

14

% 25 - 10

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bucket handle

bucket handle

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(

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7 - 5

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% 78

% 42.3

bucket handle

bucket >

Simillie

< handle

bucket handle

< screw home >

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( 9 ) : \_\_\_\_\_  
( )

: Discoid meniscus

( )

(4)

.. - ( )

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**bucket handle**

(..

(giving way)

. hamstring

jump out of)

. ( )

(place

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: **MC Murry**

... 90

90 ) MC Murry :  
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90

: **apley test – griding test**

( )

: **squat test**

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(4)

CT – MRI  
.. scintigram

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CT – MRI -

T<sub>2</sub>

T<sub>1</sub>

:(4)

T<sub>2</sub>

: MRI

|  |             |
|--|-------------|
|  | : Grade I   |
|  | : Grade II  |
|  | : Grade III |
|  | : Grade IV  |

%80

PCL

Bucket handle

ACL

( 5

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6 - 3

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stable

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bucket handle

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ACL

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6 - 4

( -hamstrings -

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3\1 - 4\1  
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( 4 - 3 )

(90-0)

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## : Discoid meniscus

( wrisberg type / / ) : watanabe et al  
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### : Wrisberg

( Wrisberg )

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( snapping knee syn. )

. MRI

16

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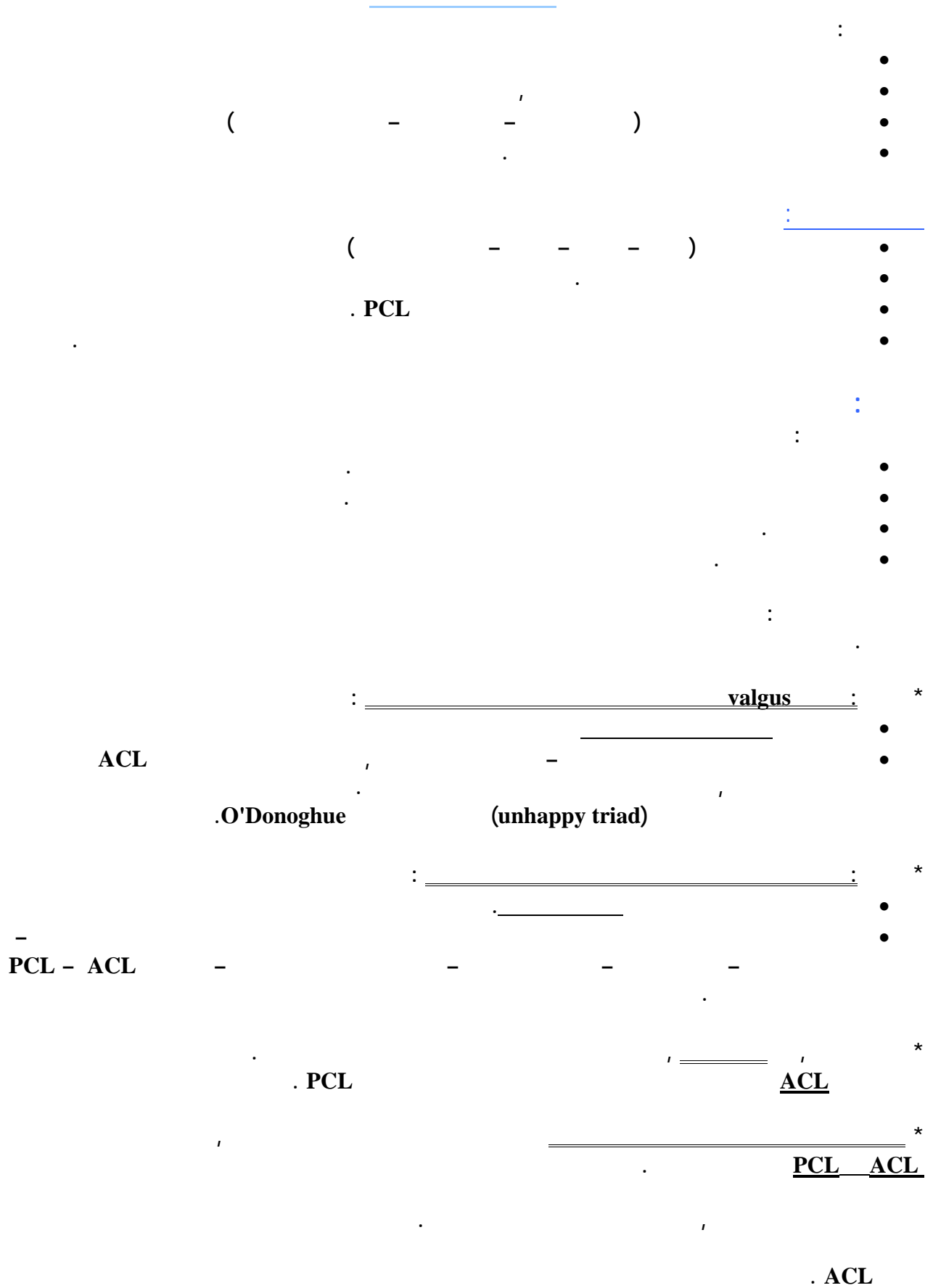
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( ( )

(saucerization) (

Wrisberg

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, sprain

: 1968

: 3

:( ) 1

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:( ) 2

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:( ) 3

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stress test

3

5 : 1+

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10 - 5 : 2+

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10 : 3+

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. jumping out of place

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(soft / mushy) ( hard ) end point

### :Stress test \*

#### :(Abd.) Valgus Stress Test

( ) . 30

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#### :(Add.) Varus Stress Test

°30

: °30 \*

: PCL - ACL  
(ACL)

### :Anterior Drawer \*

( )

°90 °45

. hamstring

) .°30

/ °30

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/

:

(PCL

ACL <<

8-6

<<< <<< ) : PCL \*  
 .(ACL \*  
 . <<< \*  
 .door stopper \*  
 .( ) \*

:Lachman test\*

. (°15-0) <<<  
 .( - - )  
 (soft / mushy end point)

:Posterior Drawer test \*

PCL <<<  
 ( °90 °90 ) :  
 1 <<< \*  
 .PCL , \*

: \*

PCL 2

:Slocum test / Anterior rotary test

( °15 - °30 - °0 )  
 :  
 °15 + ( °30 - °0 ) •  
 °30 + ( °15 - °0 ) •  
 <<<<  
 <<<<

:Jerk test

( + °90 ) <<<  
 . jerk =





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( / / / / )

<<

\*

<<<

, 17 stress test

( )

.(.. )

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|       |                  |
|-------|------------------|
| ( )   | - I              |
| - C   | - A              |
| - D   | - B              |
| :     | - II             |
| - C   | - A              |
| - D   | - B              |
|       | - B <sub>1</sub> |
|       | - B <sub>2</sub> |
| :     | - III            |
| ( + ) | - A              |
| ( + ) | - B              |
| ( + ) | - C              |

|                 |   |             |
|-----------------|---|-------------|
|                 |   | - I         |
| - ACL -         | ( | : <u>IA</u> |
| ( PCL - ACL -   | - | : <u>IB</u> |
| ( / - / - PCL ) |   | : <u>IC</u> |
| ( / - / - ACL ) |   | : <u>ID</u> |

|           |           |                               |
|-----------|-----------|-------------------------------|
|           |           | - II                          |
| -         | ( ACL     | - <u>II A</u>                 |
|           |           | - <u>II B</u>                 |
| .         | + °90     | - II B <sub>1</sub>           |
| ( / ACL - | -         | •<br>•<br>- II B <sub>2</sub> |
|           | ( - ACL ) | •<br>•                        |
| . PCL     | ( ACL -   | - <u>II C</u>                 |
|           | IC        |                               |
| - PCL -   | -         | - <u>II D</u>                 |
|           | ( ACL     |                               |

|             |              |                            |
|-------------|--------------|----------------------------|
|             |              | - III                      |
|             | :Stress test | •                          |
| .           | = °0         | • : _____ + - <u>III A</u> |
| .           | = °30        | •                          |
| .           | = °30        | •                          |
| . PCL - ACL |              | : _____ + - <u>III B</u>   |
| ACL         | , . PCL -    | : _____ + - <u>III C</u>   |

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: 1 \_\_\_\_\_

: 2 \_\_\_\_\_

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6 - 4

(

hamstrings

: 3 \_\_\_\_\_

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valgus

3

( 3+ 2+ ) 3

stress test

:

B<sub>1</sub>

. ACL

, ACL

:

< spiked washer >

<drill>

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- 
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- )

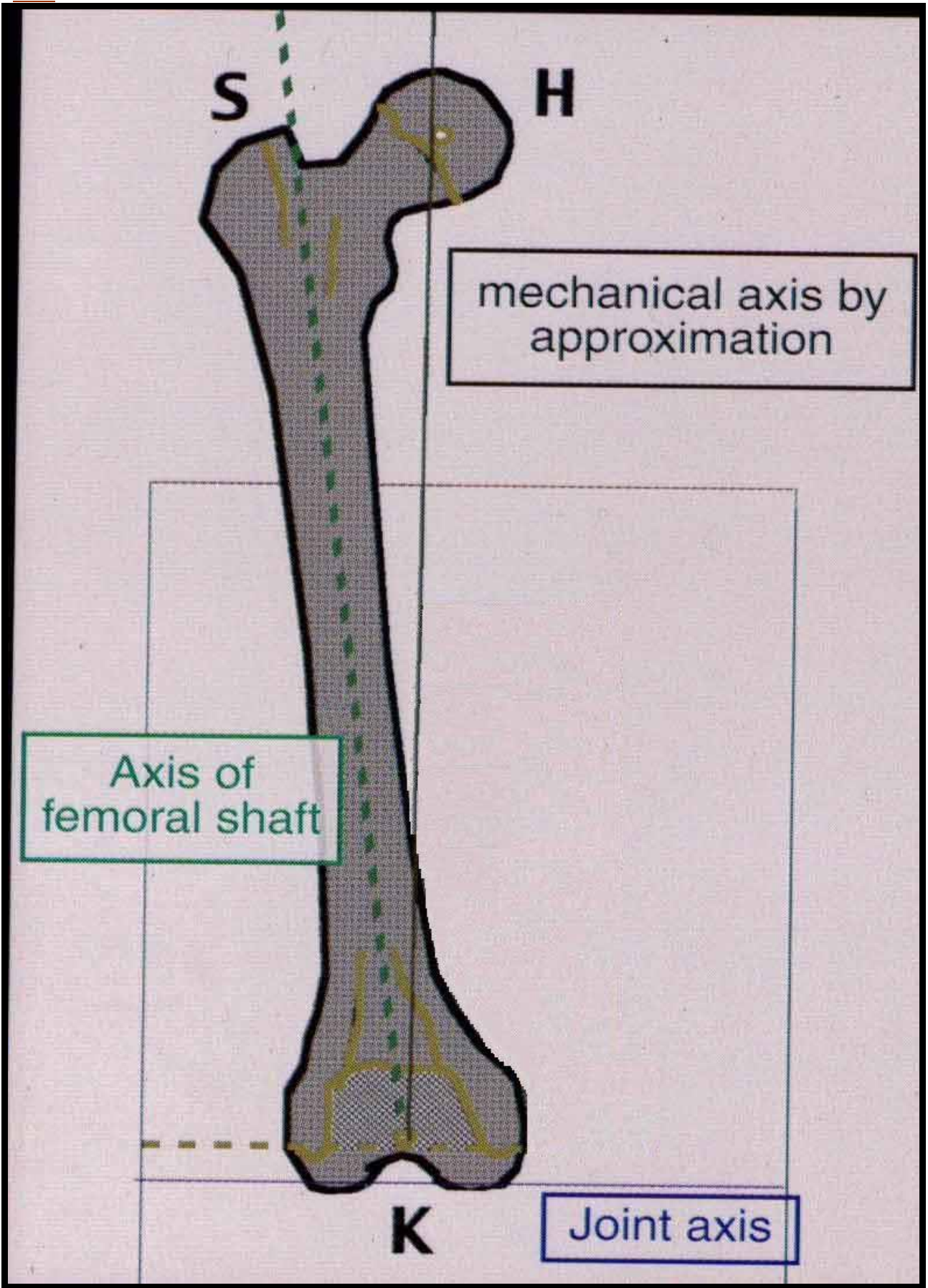
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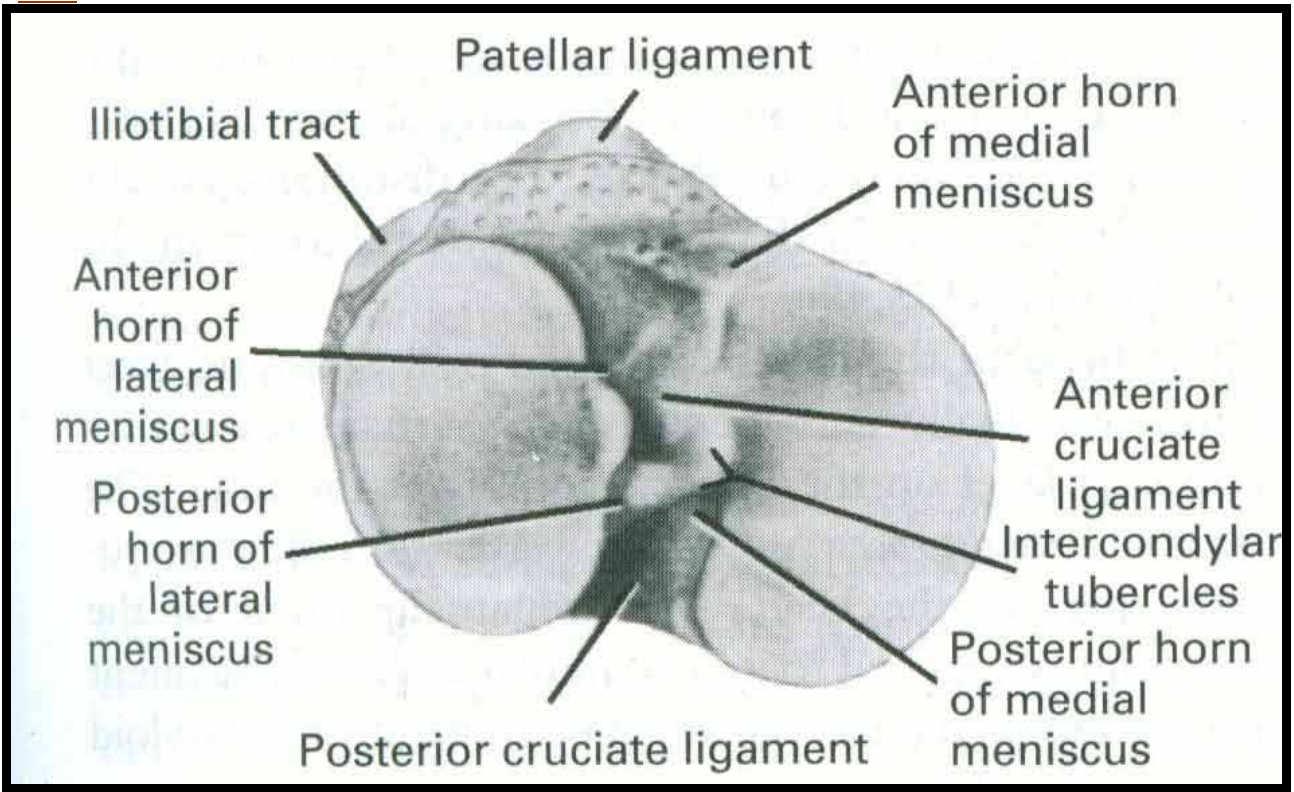
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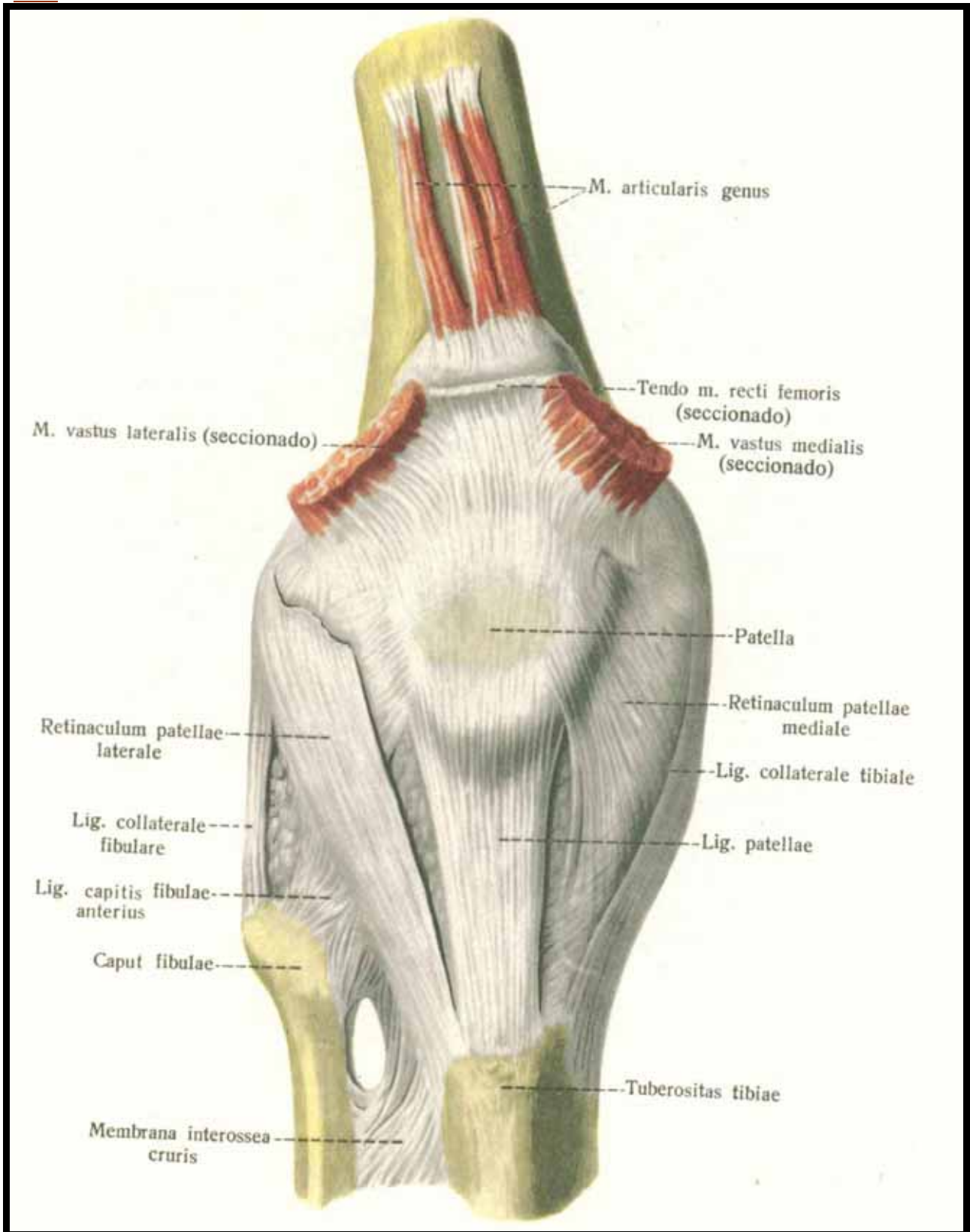
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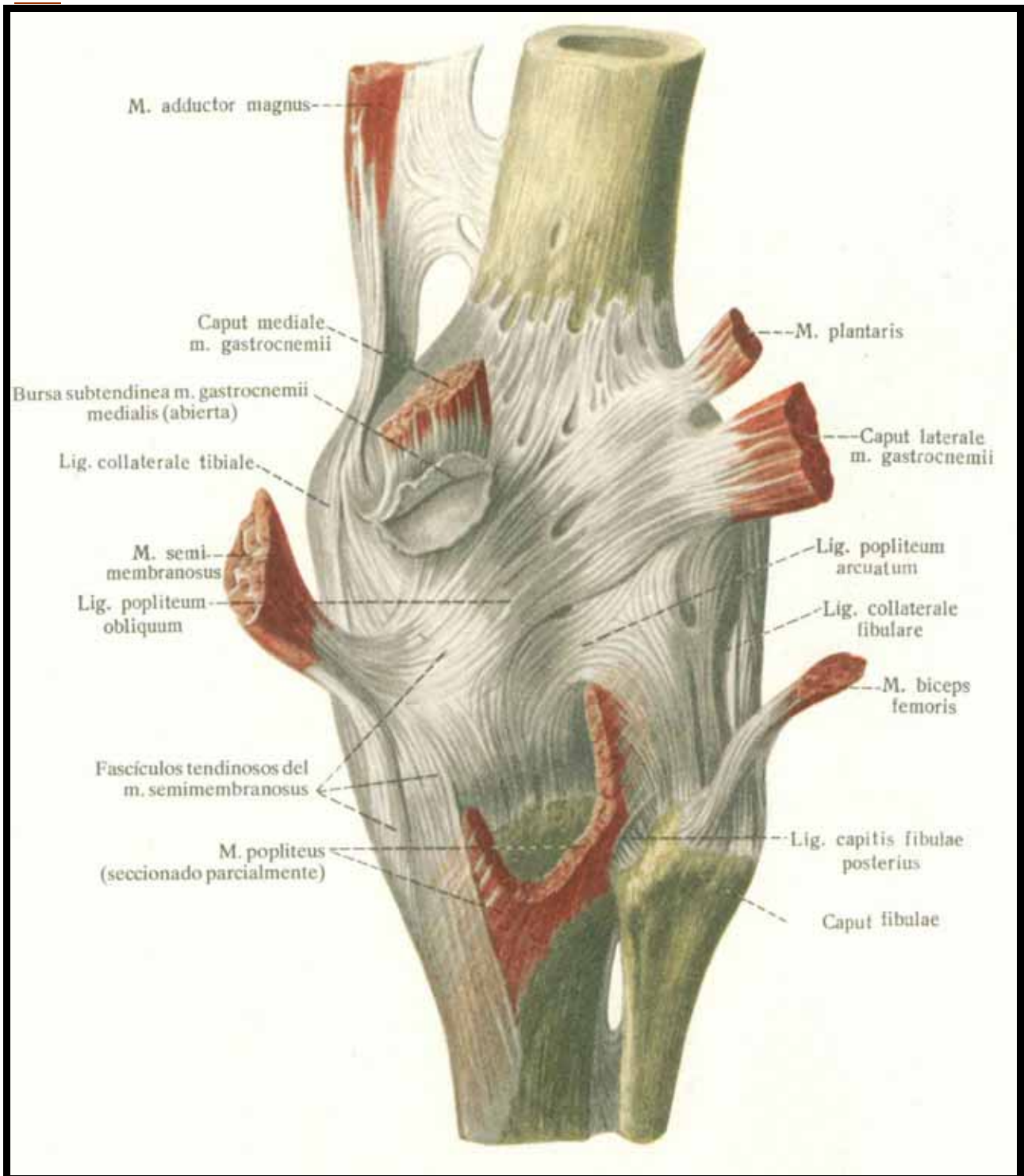
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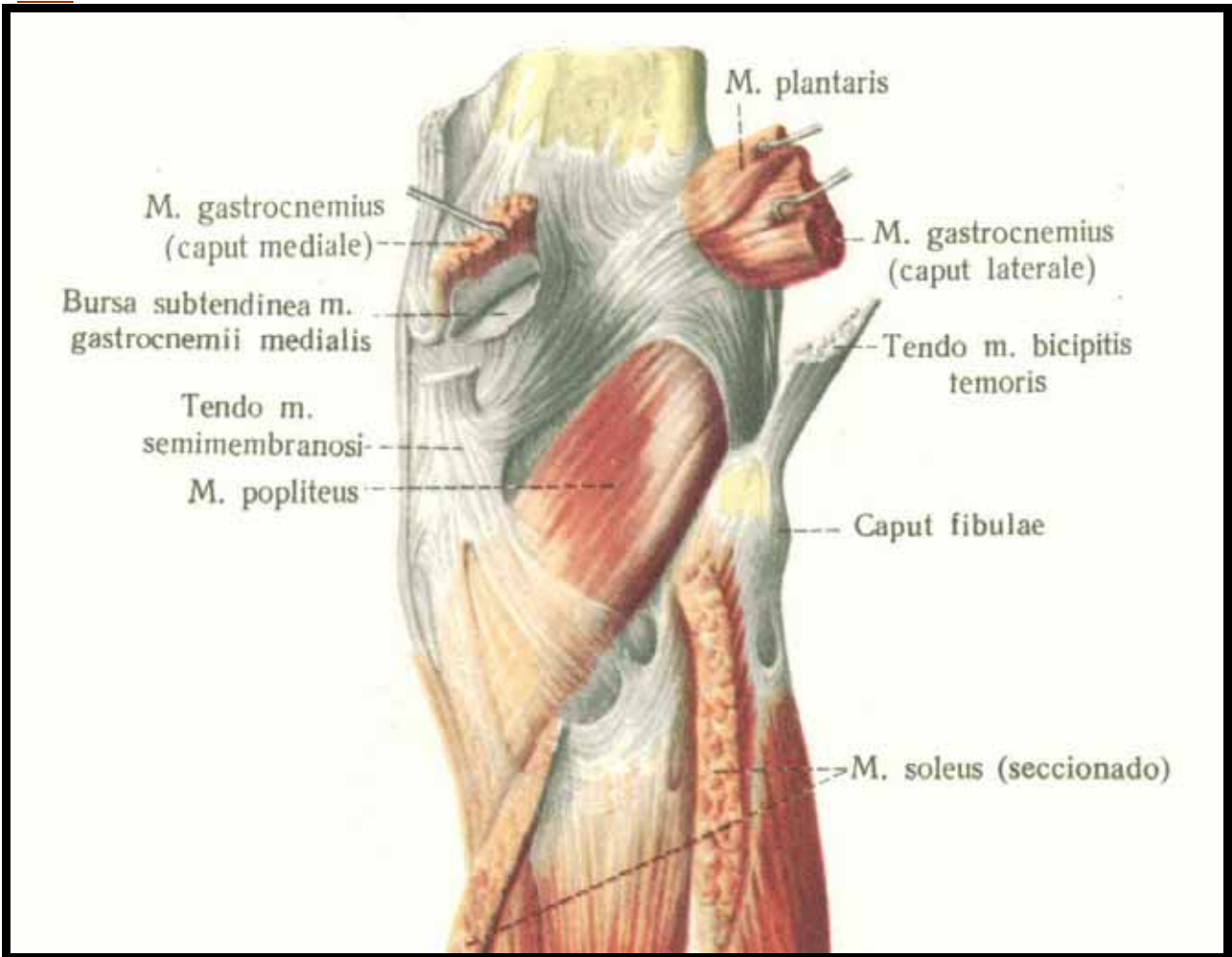
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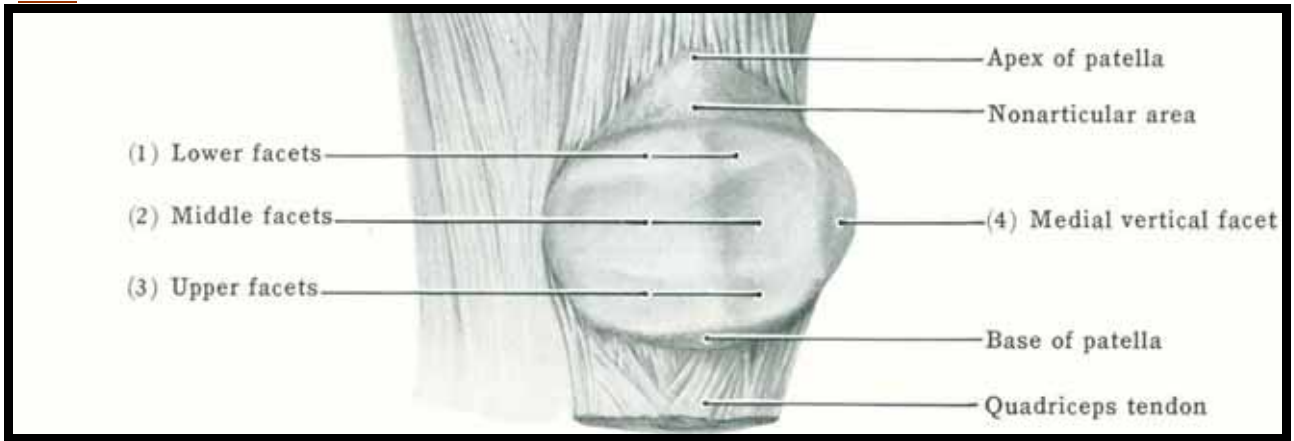


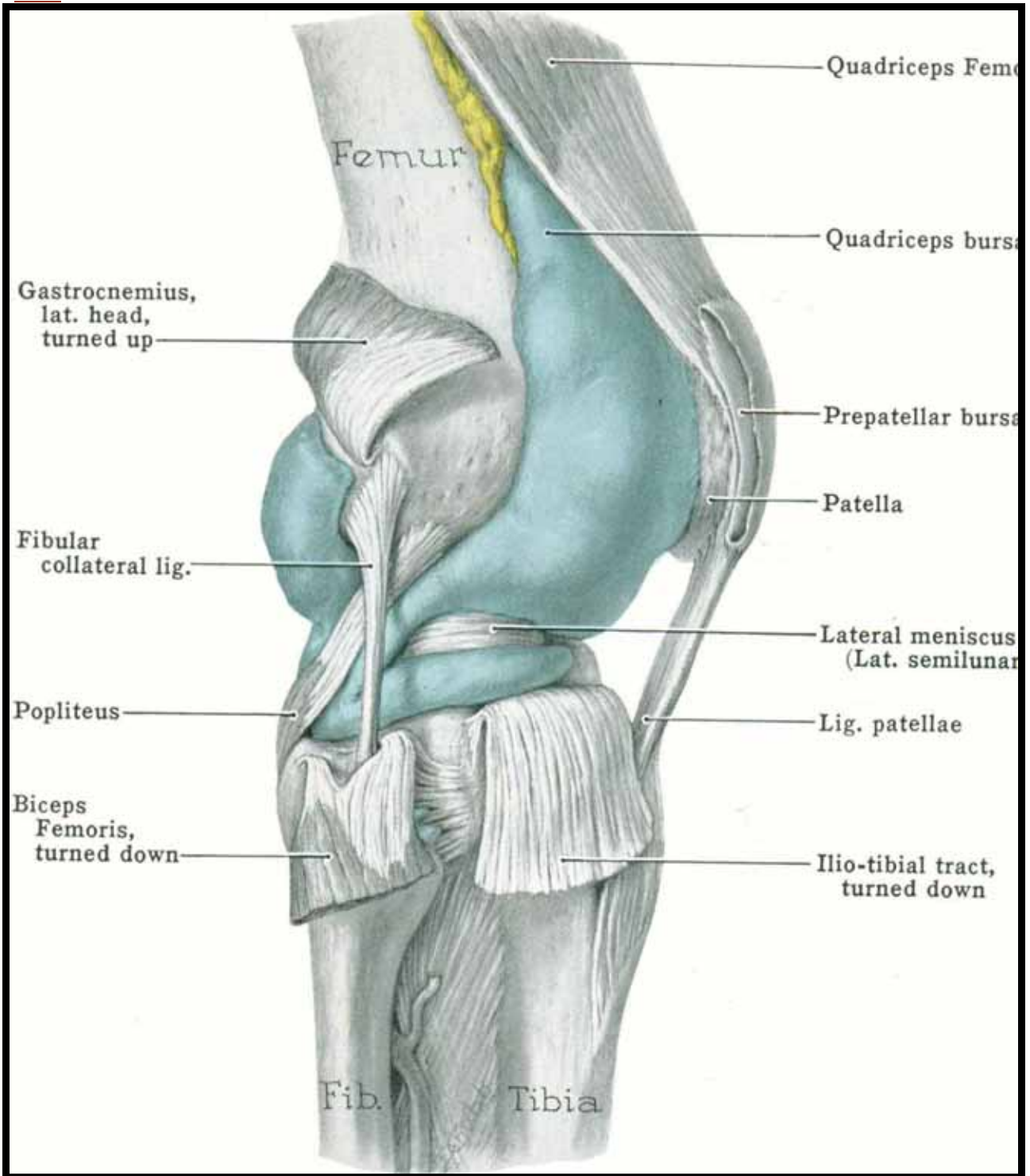


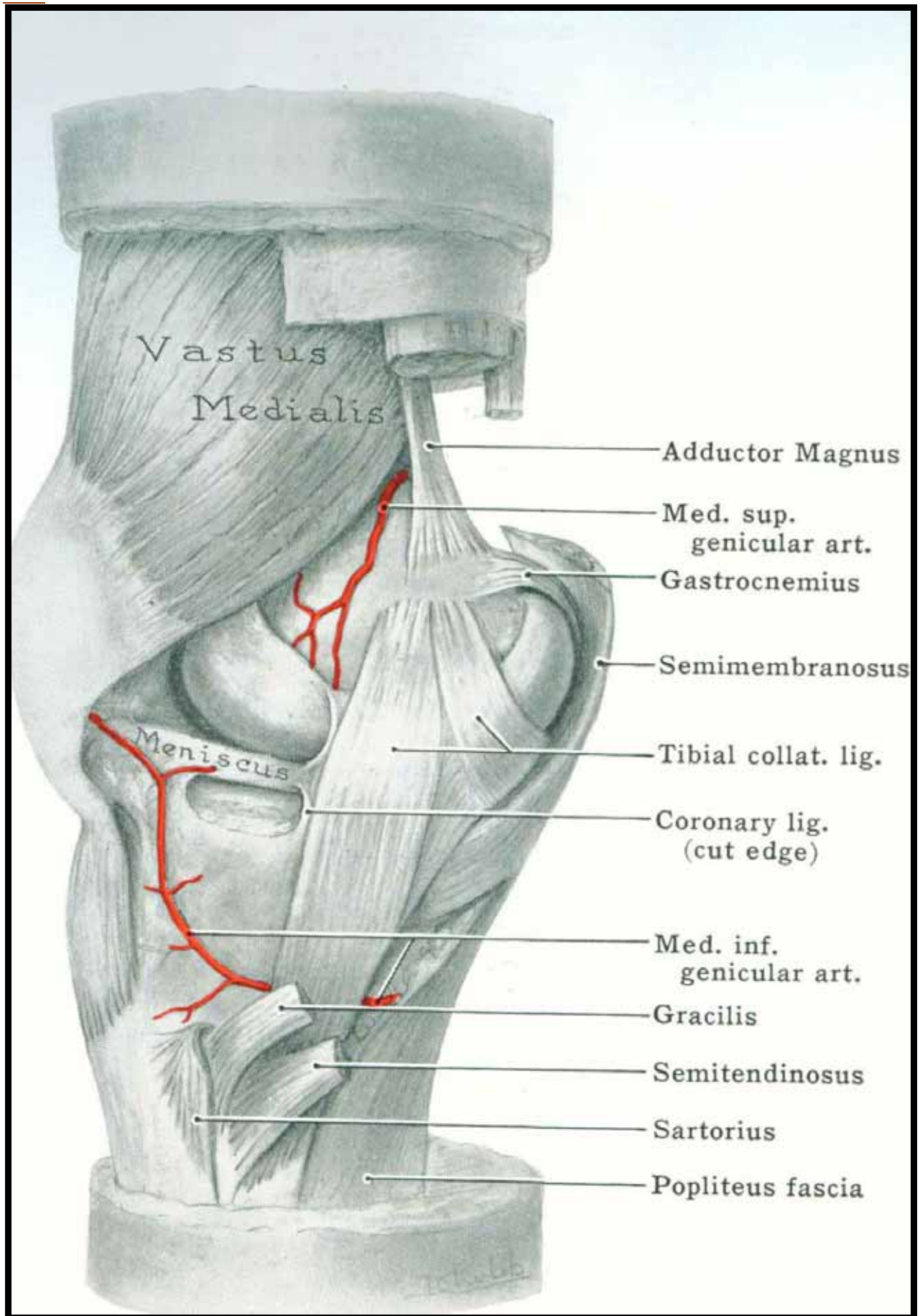


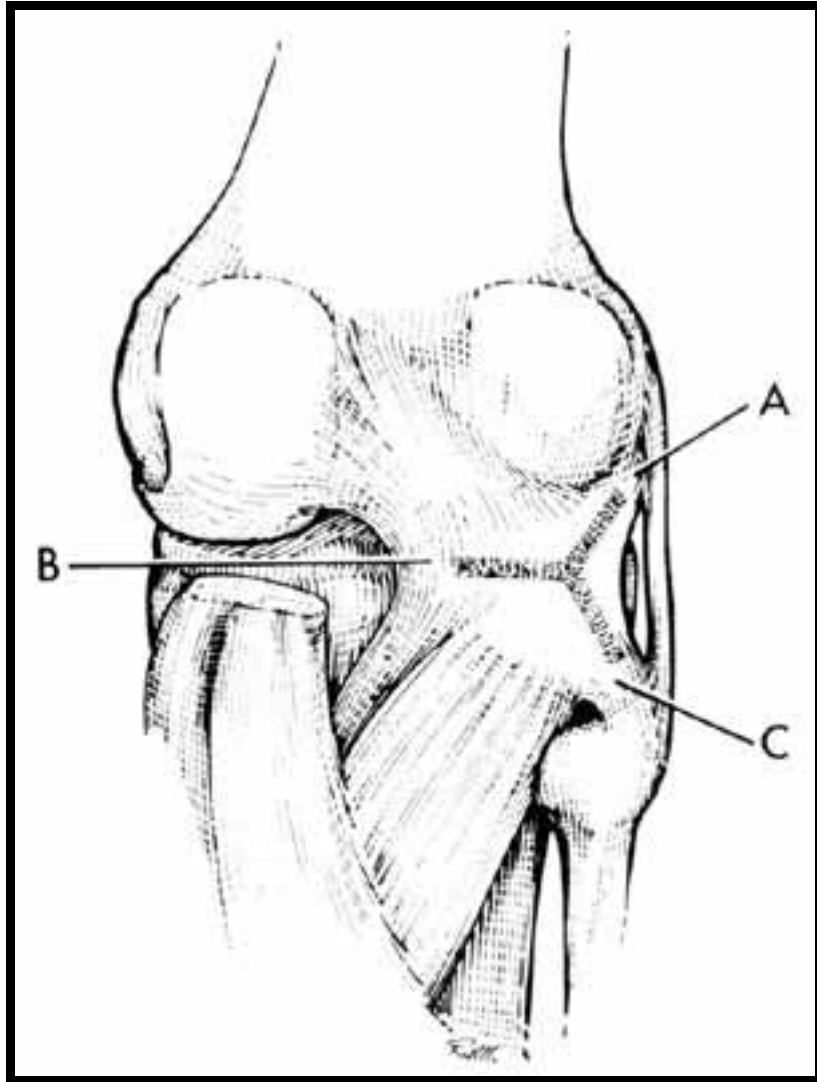


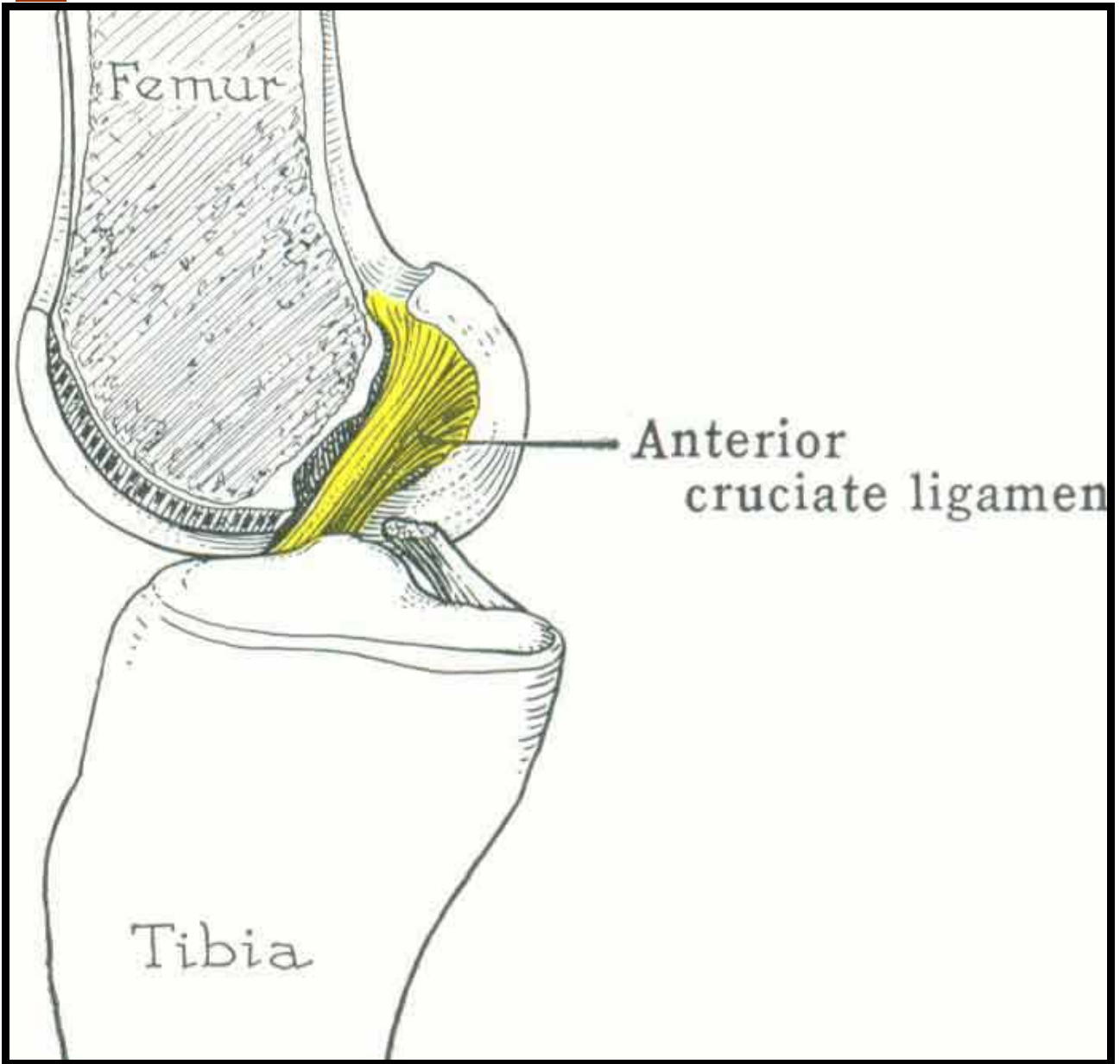


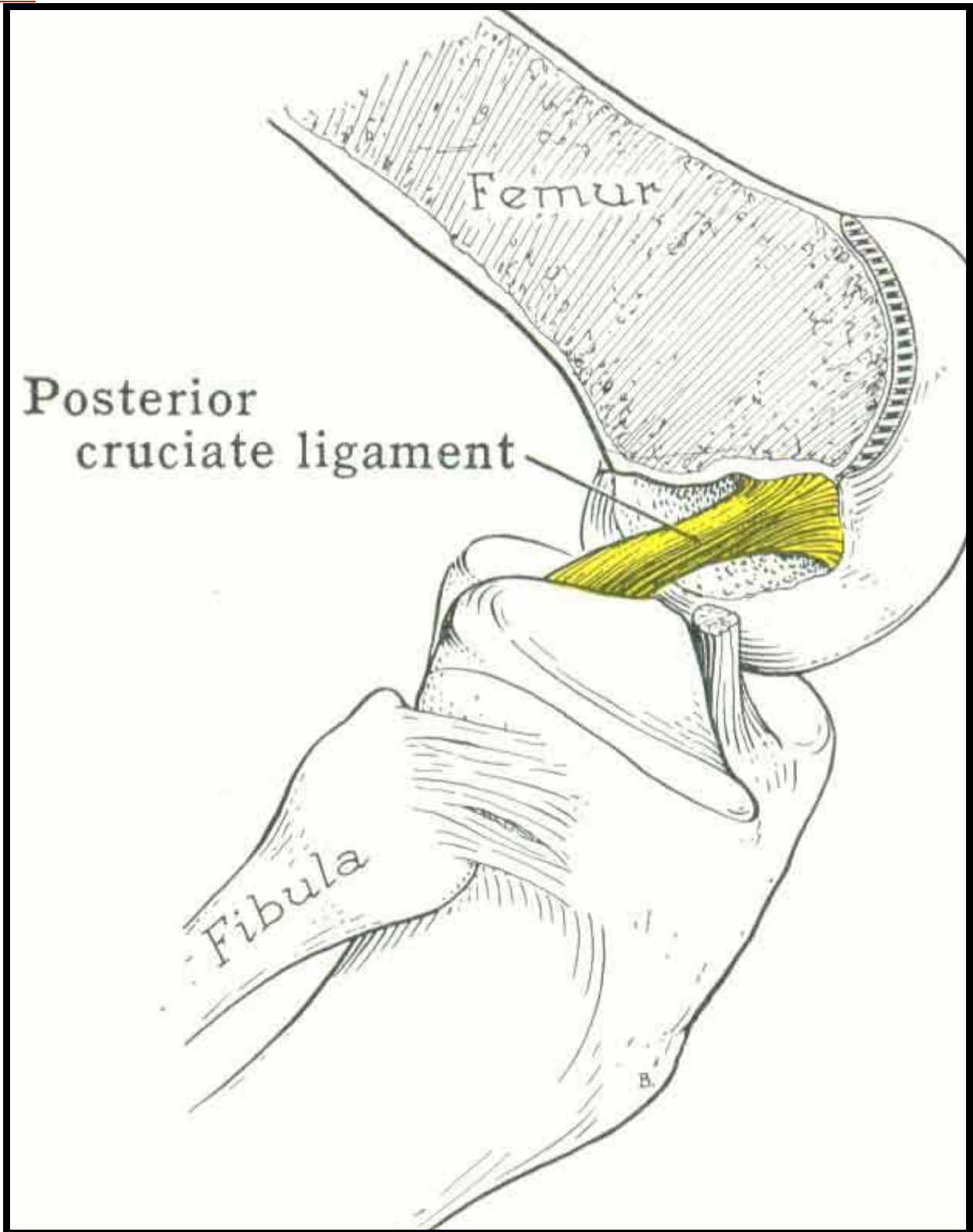


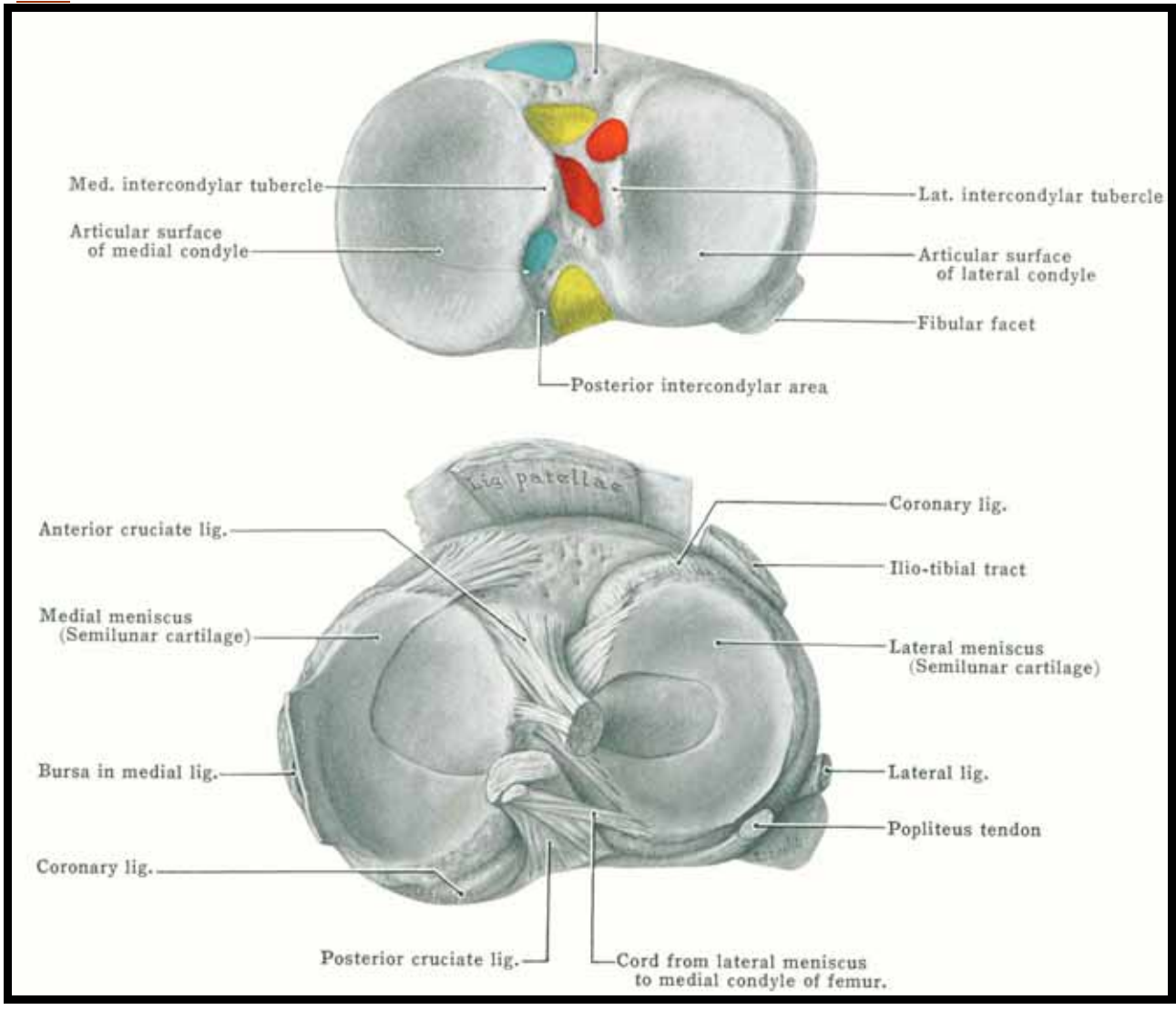


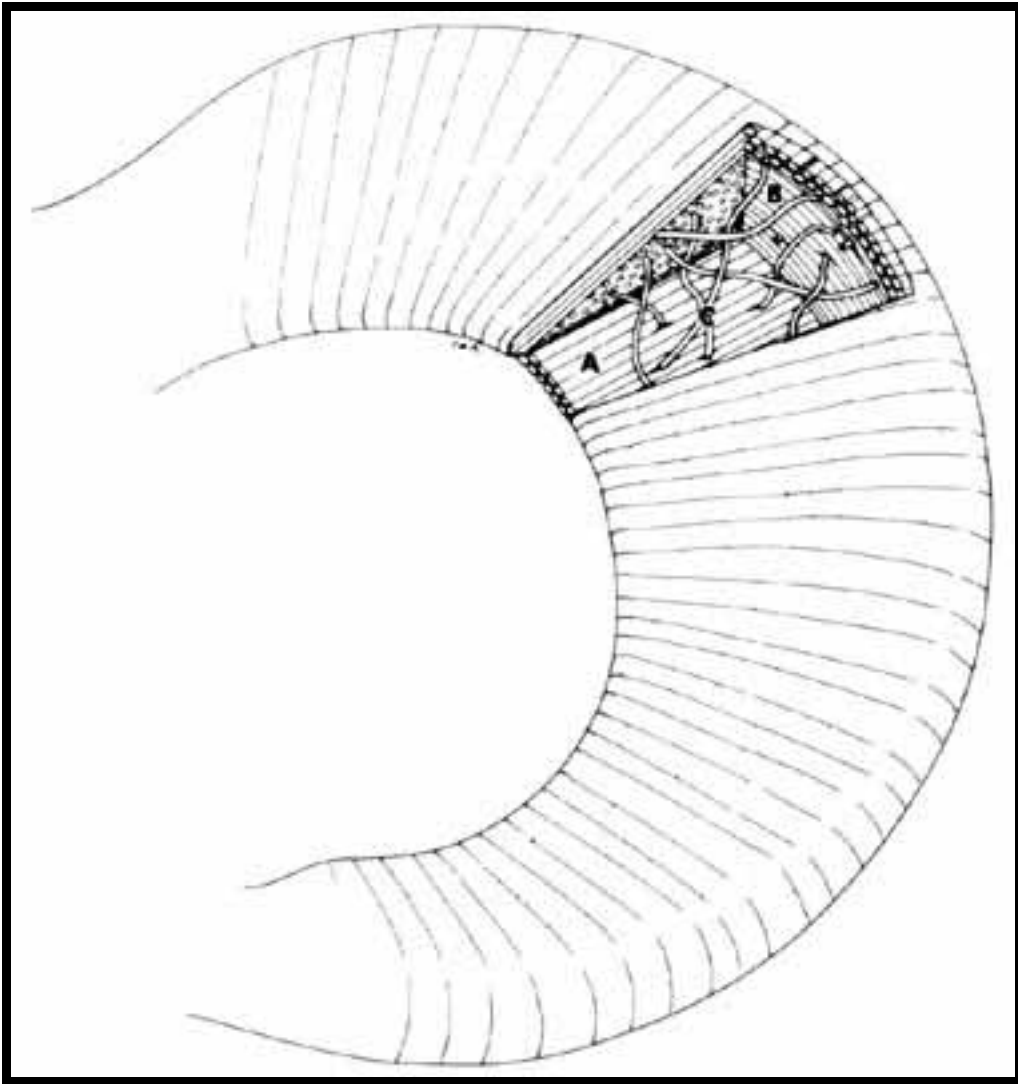


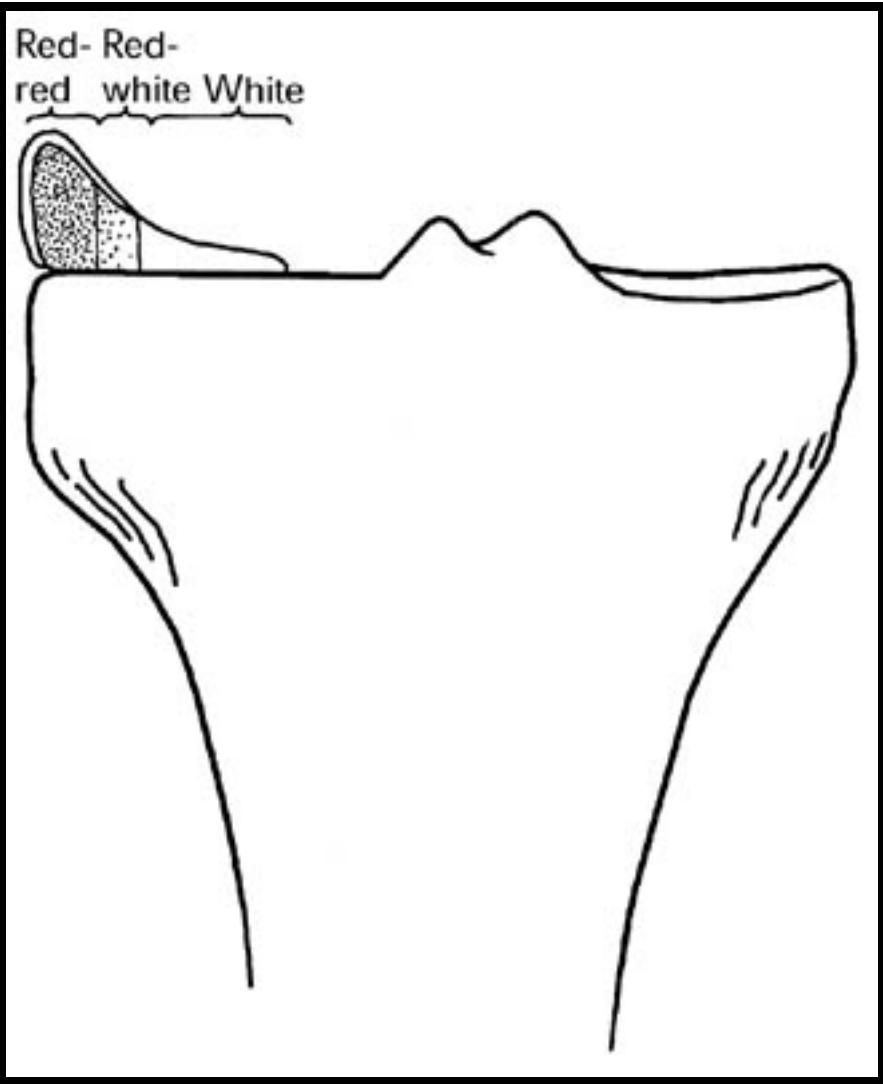


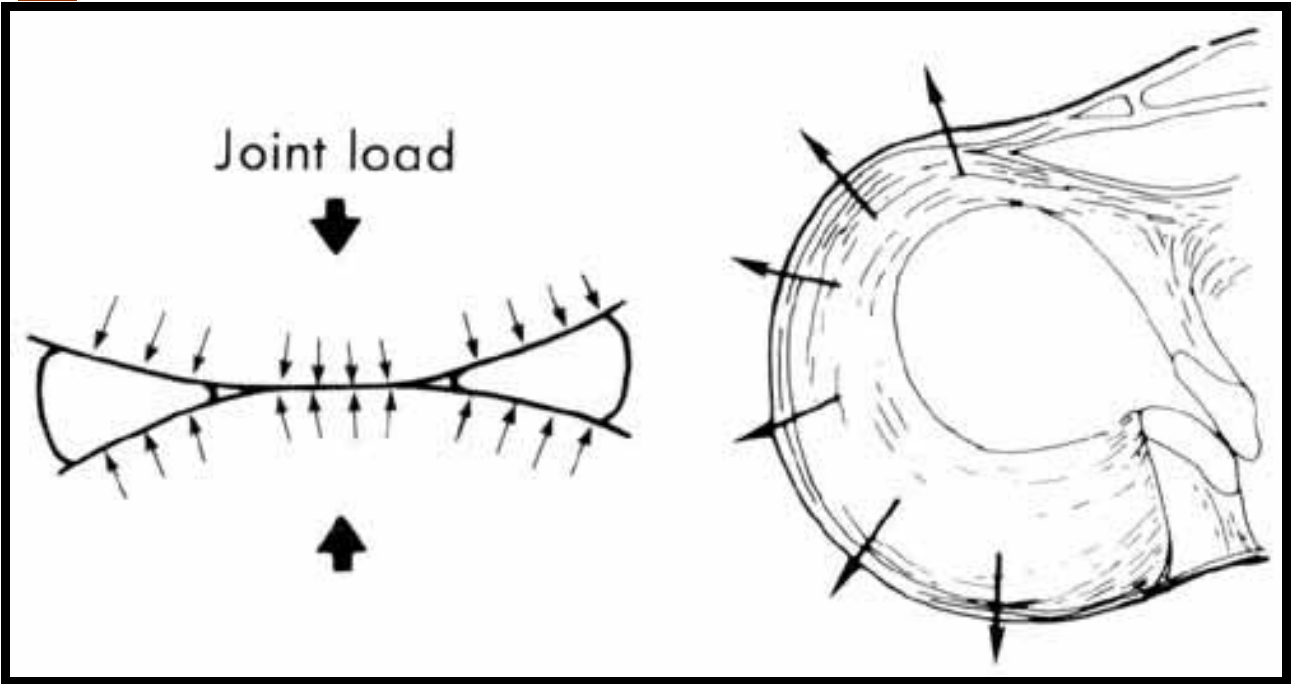










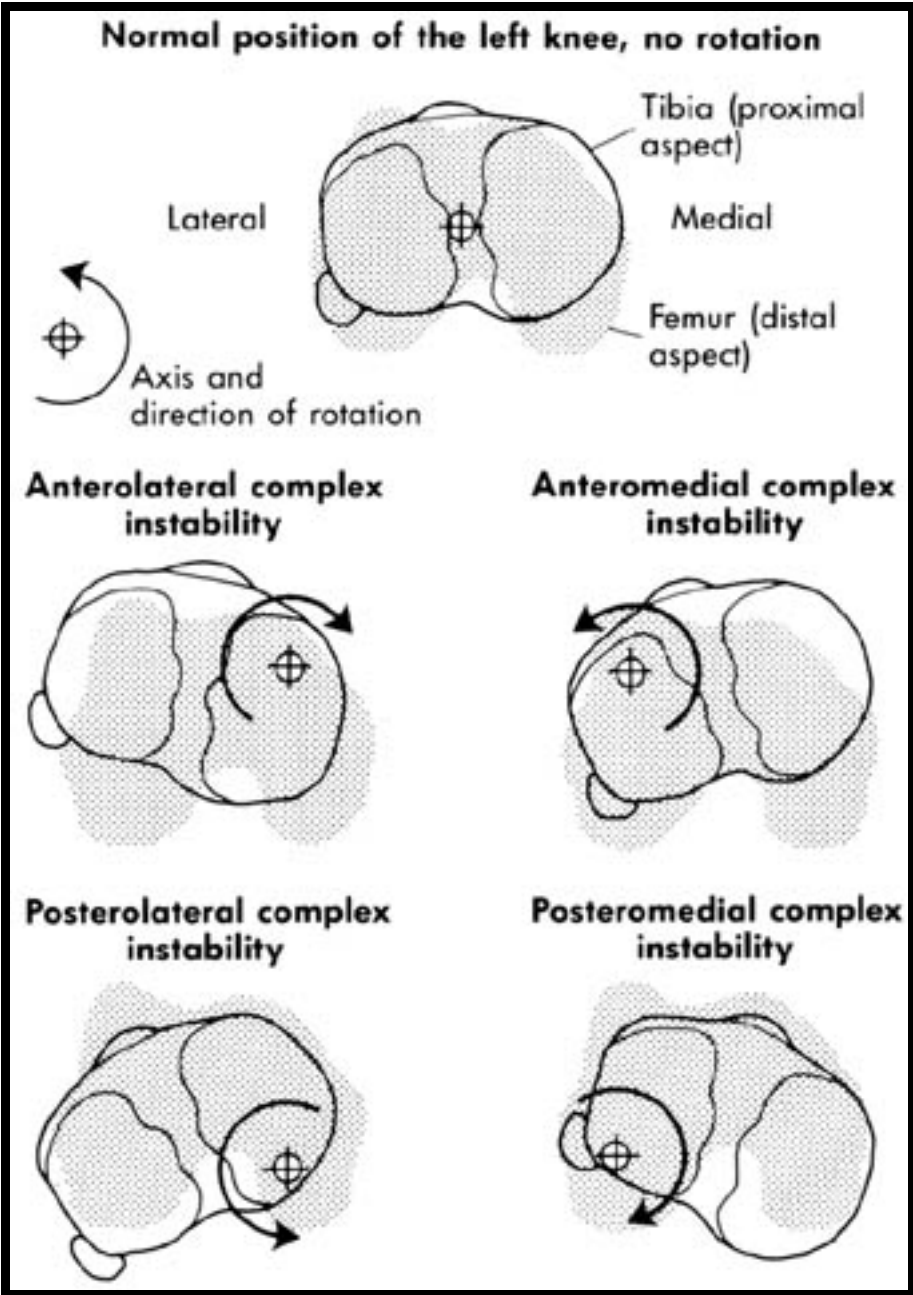




(a)

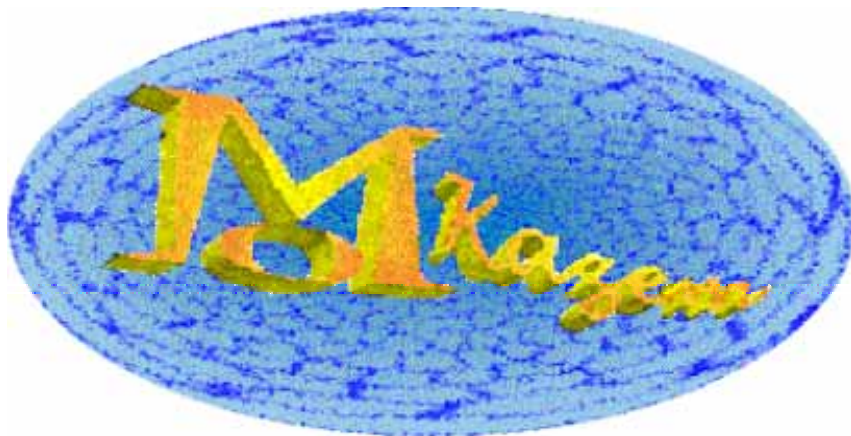


(b)



Reference:

- (1) **Last's Anatomy**
- (2) **Campell's Operative Orthopedics**
- (3) **knee reconstruction**
- (4) **Rockwood**



[www.MoKazem.com](http://www.MoKazem.com)  
2001-2005

# MoKazem.com

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- الموقع غير مسؤول عن الأخطاء الواردة في هذه المحاضرة.

- This lecture is one of a series of lectures were prepared and presented by residents in the department of orthopedics in Damascus hospital, under the supervision of Dr. Bashar Mirali.
- This site is not responsible of any mistake may exist in this lecture.