

***ROLE OF MR IMAGING IN DIAGNOSIS
OF SYNOVIAL LESIONS AROUND THE
KNEE***

An Essay

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Diagnostic Radiology

Presented

By

Mohammed Ramadan Abd El-Aziz

M.B.B.Ch. Ain Shams University

Supervised

By

Dr. Faten Mohammed Mahmoud Kamel

Prof. of Diagnostic Radiology

Faculty of Medicine

Ain Shams University

Dr. Remon Zaher Ilia

Lecturer of Diagnostic Radiology

Faculty of Medicine

Ain Shams University

Faculty of Medicine

Ain Shams University

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Contents

	Page
Introduction	1
Aim of work	4
Anatomy	5
Pathology	36
Technique of knee MRI	52
MRI features of synovial lesions around knee	67
Summary	118
References	119
Arabic summary	

List of Abbreviations

MRI → magnetic resonance imaging
ACL→ anterior cruciate ligament
PCL→ posterior cruciate ligament
SE→ spin echo
FSE→ fast spin echo
CT → computed tomography
STIR→ short tau inversion recovery
SNR→ signal to noise ratio
PD→ proton density
PVNS→pigmented villonodular synovitis
TCL→ tibial collateral ligament
MCL→ medial collateral ligament
DESS→ double echo steady state
SMTCL→ semimembranosus tibial collateral ligament
FCL→ fibular collateral ligament
PTFJ→ proximal tibiofibular joint
RA→ rheumatoid arthritis

List of Figures

Fig. No.		Page
1	Knee capsule and synovium	3
2	Illustration of bursa around the knee	8
3	Origin and insertion of common synovial plicae	9
4	Illustrations of the plicae of the knee	11
5	Ligaments, menisci and bursae of the knee	13
6	Right knee joint ligamentum patellae, articular capsule and tibial collateral ligament	16
7	Right knee joint ACL, PCL ,medial and lateral menisci	18
8	Menisci and attachment of ligaments.	20
9	Axial MR images of the knee	23-26
10	Sagittal MR images of the knee	27-29
11	Coronal MR images through the knee	30-31
12	Axial sequence planning	56
13	Coronal sequence planning	57
14	Sagittal sequence planning	58
15	Popliteal (Baker's).	66
16	Popliteal (Baker's).	66
17	Popliteal cyst wall enhancement and dissection.	67
18	Popliteal cyst with haemorrhage	68
19	Loose bodies within a popliteal cyst	68
20	Ruptured popliteal cyst	69
21	Popliteal cyst dissection	70

22	Popliteal cyst with secondary chondromatosis	71
23	Popliteal cyst with pigmented villonodular synovitis	72
24	Pes anserine bursitis	73
25	Pes anserine bursitis	74
26	Pes anserine bursitis	74
27	Meniscal cyst.	75
28	Medial collateral ligament bursitis	76
29	Medial collateral ligament bursitis	77
30	Ganglion	79
31	Semimembranosus/tibial collateral ligament bursitis	80
32	Semimembranosus/tibial collateral ligament bursitis	81
33	Prepatellar bursitis	82
34	Prepatellar bursitis	83
35	Superficial infrapatellar bursitis	84
36	Superficial and deep infrapatellar bursitis	84
37	Deep infrapatellar bursitis	85
38	Deep infrapatellar bursitis	86
39	Osgood-Schlatter disease	86
40	Suprapatellar bursa	87
41	Suprapatellar bursitis	88
42	Iliotibial bursitis	89
43	Proximal tibiofibular joint cyst	90
44	Proximal tibiofibular joint cyst	91
45	Intraneural peroneal nerve ganglion	92
46	Diffuse PVNS of the knee	94
47	Diffuse intraarticular PVNS of the knee	94
48	“blooming” artifact	95

49	Characteristic features of PVNS	96
50	Diffuse intraarticular PVNS of the knee	97
51	Diffuse intraarticular PVNS of the knee	98
52	Synovial osteochondromatosis	100
53	Primary synovial chondromatosis of the knee	101
54-57	lipoma arborescens	103-105
58-60	Synovial hemangioma	106-108
61-65	Synovial sarcoma	110-113

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
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Introduction

Disorders of the knee are responsible for a major source of referrals to the musculoskeletal radiologists. Most cases have suspected abnormalities within the joint either following an acute injury or a more insidious development of symptoms. Other common causes of referral are anterior knee pain, focal and diffuse swellings. MRI is the technique of choice for assessing the internal structures (*Ostlere, 2003*).

Synovial disorders often affect the knee joint and are a common cause of morbidity. Before MR imaging, radiologists were limited in their ability to provide information about the presence or absence of synovial disease. With the advent of MR imaging, useful information can now be provided to referring clinicians, often at a time when the initiation of therapy may mitigate significantly the long term sequelae of synovial disorders. MR imaging owing to its superior soft tissue contrast, is the imaging modality of choice for demonstrating and quantifying pathologic changes of the