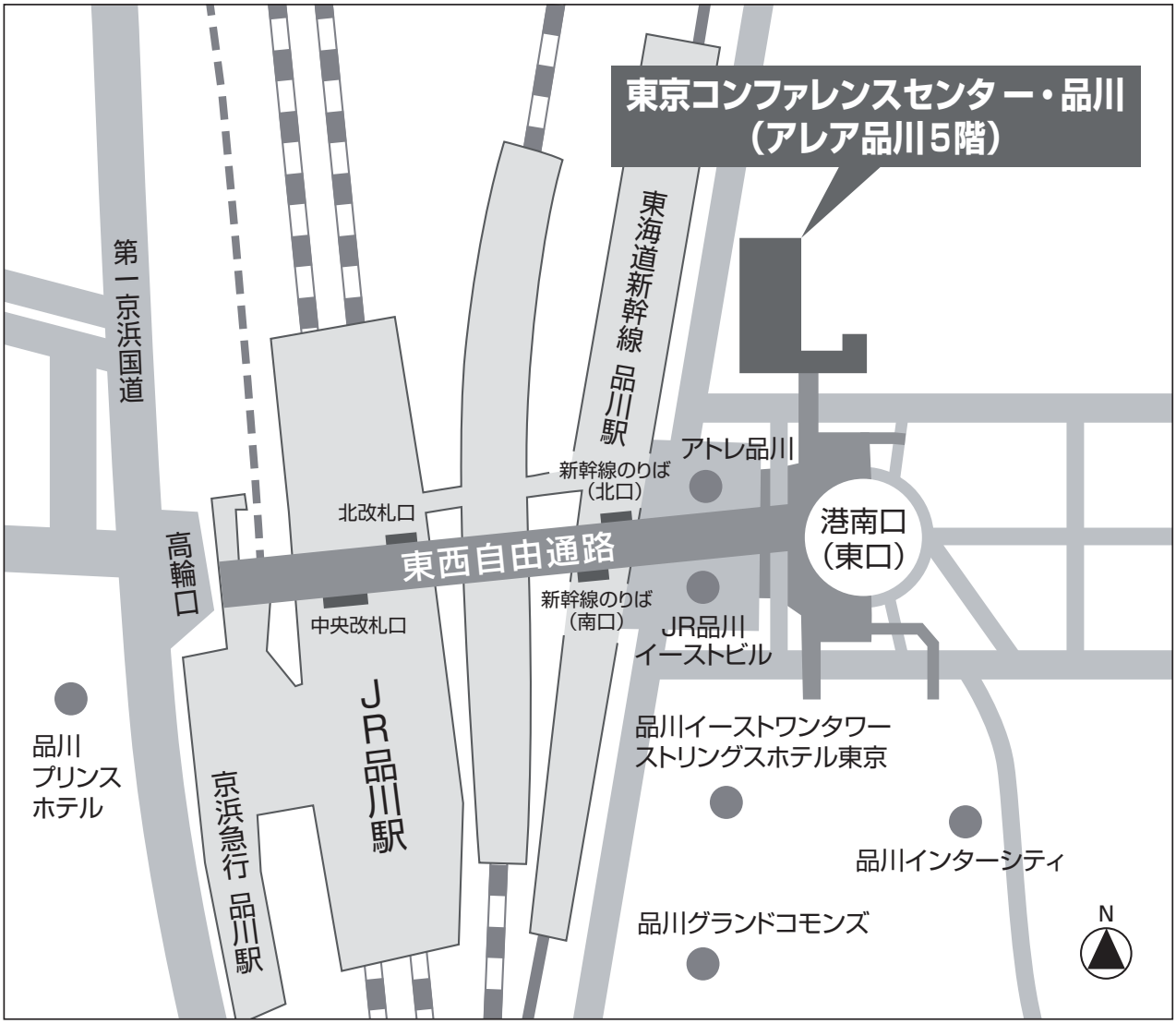
第 27 回日本骨軟部放射線研究会
会期・会場のご案内

会　　期：　2016 年 1 月 29 日（金）13：55 ― 18：20
　　1 月 30 日（土）　9：00 ― 14：50

会　　場：　東京コンファレンスセンター・品川 大ホール
　　〒 108-0075　東京都港区港南 1-9-36 アレア品川 5F
　　TEL.03-6717-7000

会場案内図



Access

JR 品川駅港南口（東口）より徒歩 2 分

運　営　事　項

1. 研究会参加者へのご案内

1) 研究会受付は、会場にて 2016 年 1 月 29 日（金）13：00 より行います。

2) 研究会参加者は参加費として ¥10,000 を会場受付でお支払い下さい。
引き替えに、名札・領収書、抄録集及び研究会出席証明書をお渡しします。

3) 本研究会での演者は日本医学放射線学会会員であることを要します。
但し、医学生および初期臨床研修医の場合はその限りではない。

2. 演者・座長の先生方へのご案内

1) 演者の先生方へ

a) 一般演題の口演時間は 6 分、討論時間は 3 分です。

b) ご自身のノート型パソコンをご持参ください。
出力端子が MiniDsub-15 ピンでない場合、変換ケーブルもご持参下さい。
ご発表の 30 分前までに、PC 受付にお越し下さい。
演台にはモニタ、マウス、キーボードをご用意いたしますのでご自身にて操作をお願いいたします。

c) 病理プレパラートは発表セッション終了後から受付にてお返しいたします。
研究会終了時間までにお受け取りお願いいたします。

2) 座長へのお願い

a) ご担当セッション開始の 30 分前までに受付をお済ませの上、会場内にお越しください。

b) セッションの進行は座長にお任せいたしますが、時間厳守にてお願いいたします。

3. 世話人会

日時：2016 年 1 月 29 日（金）18：30 － 19：00

会場：研究会会場にて

事務局：
〒 105-8461　東京都港区西新橋 3-25-8
東京慈恵会医科大学 放射線医学講座内
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第 27 回日本骨軟部放射線研究会　プログラム
第 1 日目　2016 年 1 月 29 日（金）

13：55 ― 14：00　開会の挨拶　　**大友　邦**

14：00 ― 14：54　Session 1　外傷その他　　**座長　川原　康弘（長崎労災病院）**

1. Spontaneous healing of a bucket-handle lateral meniscal tear in a young boy
   Department of Radiology, Nagasaki University School of Medicine
   Hirofumi Koike 他
2. MR imaging findings of pathologic mediopatellar plicae (medial patellar plica syndrome): arthroscopic correlation
   Department of Radiology, Nagasaki University Hospital
   Tetsuji Yamaguchi 他
3. Clinical interpretation of the MR findings acquired by low-field dedicated machine for adolescent baseball players
   Department of Radiology, University of Tsukuba
   Yoshikazu Okamoto 他
4. Anterior iliac lesion in three young male athlete
   Departments of Radiology and Orthopedic surgery, Osaka University Graduate School of Medicine
   Hisashi Tanaka 他
5. Post-traumatic permanent dislocation of the patella in the left knee joint
   Department of Radiology, Toho University Sakura Medical Center
   Masayuki Odashima 他
6. A case of chronic expanding hematoma after total hip arthroplasty; Angiographic findings at preoperative embolization
   Department of Diagnostic Radiology, Kitasato University School of Medicine
   Haruto Sugawara 他

14：54 ― 15：48　Session 2　関節疾患その他　　**座長　橘川　薫（聖マリアンナ医科大学）**

7. MR findings of polymyalgia rheumatica; a case report
   Department of Radiology, The Jikei University School of Medicine
   Shinjiro Tojo 他
8. CT and MRI demonstration of myopathic change in polyarteritis nodosa
   Department of Radiology, St. Marianna University School of Medicine
   Kaoru Kitsukawa 他
9. Dual-energy CT evaluation of psoriatic arthritis: initial experience
   Department of Radiology, The Jikei University School of Medicine
   Takeshi Fukuda 他
10. Calcific periarthritis involving the left iliacus muscle: a case with “wandering calcification”
    Department of Radiology, Numazu City Hospital
    Hajime Fujimoto 他

11. Bone marrow lesions, subchondral bone cysts and subchondral bone attrition are associated with histological synovitis in patients with end-stage knee osteoarthritis: a cross-sectional study

Department of Radiology, Juntendo University Graduate School of Medicine

Akifumi Hagiwara 他

12. Aiming of a shorter psoriatic arthritis MRI protocol: can contrast-enhanced MRI replace STIR for the detection of synovitis?

Department of Radiology, The Jikei University School of Medicine

Takenori Yonenaga 他

15：48 ― 16：00 休憩

16：00 ― 17：03 Session 3 脊椎・脊髄疾患　　座長 國松 聡（東京大学）

13. A case of idiopathic spinal cord herniation with characteristic imaging findings

Department of Radiology, Mutual Aid Association for Tokyo Metropolitan Teachers and Officials, Sanraku Hospital

Masanori Ishida 他

14. Stickler syndrome with cervical cord compression caused by dens deformity: a case report

Department of Radiology, University of Tsukuba Hospital

Masafumi Sakai 他

15. A morphological classification for thoracolumbar transitional vertebrae

Department of Radiology, Research Hospital, The Institute of Medical Science, The University of Tokyo

Yoshiyasu Nakano 他

16. Anomaly of the atlas and axis causing cervical myelopathy

Department of Pediatric Medical Imaging, Jichi Children's Medical Center Tochigi

Waka Nakata 他

17. Arachnoid divertula with scalloping of the posterior aspect of the vertebral bodies

Department of Radiology, Jichi Medical School

Atsushi Ugajin 他

18. A case report of calcium pyrophosphate dihydrate crystal deposition disease (CPPD) similar to Osteosarcoma

Department of Radiology, Tokyo Dental College, Ichikawa General Hospital

Yuko Kobashi 他

19. Two cases of Melanotic Schwannoma of the Lumbar Spine

Department of Radiology, Graduate School of Medical Science, University of the Ryukyus

Maho Tsubakimoto 他

17：03 ― 17：20 休憩

17：20 ― 18：20 片山記念講演　　座長：大友 邦（東京大学）

MDM2 status in osteosarcoma: diagnostic implications

国立がん研究センター中央病院 病理科

吉田 朗彦 先生

第２日目　2016年１月30日（土）

9：00 ― 10：03　Session 4　軟部腫瘍その他1　　座長　渡谷　岳行（東京大学）

20. A case of sinonasal inverted papilloma with ossification
Department of Radiology, Kyoto City Hospital
Hirotsugu Nakai 他

21. Bizarre parosteal osteochondromatous proliferation of the sternum
Department of Radiology, Kinki University School of Medicine
Hideyuki Fukui 他

22. MR imaging findings of pilomatricomas: a radiological-pathological correlation
Department of Radiology, Gifu University Hospital
Hiroki Kato 他

23. A case of solitary synovial chondromatosis arising in the gluteus maximus bursa
Department of Radiology, Teikyo University Mizonokuchi Hospital
Department of Radiology, National Center Hospital of Neurology and Psychiatry
Kaoru Sumida 他

24. A case of fibroma of tendon sheath with bone invasion in the wrist
Department of Radiology, Faculty of Medicine, Kagawa University
Yuko Ono 他

25. Desmoplastic fibroblastoma of the hand; mimicking fibroma of tendon sheath
Department of Radiology, Faculty of Medicine, Kagawa University
Yuko Fukuda 他

26. A case of retroperitoneal schwannoma with ossification
Department of Radiology, Nihon University School of Medicine
Yusuke Toda 他

10：03 ― 10：57　Session 5　軟部腫瘍その他2　　座長　山本　麻子（帝京大学）

27. A case of calcifying fibrous tumor arising in a scrotum
Department of Radiology, Tokyo-kita Medical center
Tetsuya Kosaka 他

28. Transcompartmental spread of lipomatous tumors
Department of Radiology, Iwate Medical University
Michiko Suzuki 他

29. Extraskeletal osteosarcoma of the lower leg in a young woman: A case report
Department of Radiology, Yamaguchi University Graduate School of Medicine
Yuko Harada 他

30. Bednar tumor (pigmented dermatofibrosarcoma protuberans): a case report
Department of Radiology, Toho University Omori Medical Center
M. Kobayashi 他

31. Pleomorphic hyalinizing angiectatic tumor in the right popliteal space with high FDG uptake
Department of Radiology, Teikyo University School of Medicine
Yudai Nakai 他

32. Kaposiform hemangioendothelioma of the neck in a neonate
Department of Interventional Radiology, Kawasaki Saiwai Hospital of Radiology
Soichiro Hase 他

10：57 ― 11：10 休憩

11：10 ― 12：13 Session 6 骨腫瘍その他　　座長 常陸 真（東北大学）

33. A case of primary Kaposiform hemangioendothelioma of bone: effectiveness of everolimus treatment
Department of Radiology, National Center for Child Health and Development
Masaya Ishii 他

34. A case of epithelioid hemangioma in the triquetrum
Department of Radiology, Faculty of Medicine, Kagawa University
Hanae Okuda 他

35. Fibrocartilaginous Dysplasia: A case report
Department of Radiology, Kanazawa University
Miho Okuda 他

36. A case of osteoid osteoma of the distal phalanx: painful enlargement of the toe
Department of Radiology, Saitama Medical University
Mamoru Niitsu 他

37. Imaging of Giant Cell Tumor of Bone after Denosumab Injection
Department of Radiology, School of Medicine, Keio University
Sota Oguro 他

38. Ewing sarcoma in phalanx: a case report
Department of Radiology, Iwate Medical University
Tomohiro Suzuki 他

39. Bone metastases from Head & Neck cancer. Retrospective analysis of Whole Body MRI (WB-MRI), FDG-PET and CT
Department of Diagnostic Radiology, Osaka Medical Center for Cancer and Cardiovascular Diseases
Katsuyuki Nakanishi 他

12：13 ― 12：25 休憩・弁当配布

12：25 ― 12：35 事務局報告　　事務局 福田 国彦

12：35 ― 12：45 フェローシップ報告　　湘南医療大学 保健医療学部 須山 淳平

12：45 ― 14：45 フィルムリーディングセッション　　司会　NTT 東日本関東病院 赤羽 正章

14：45 ― 14：50 閉会の挨拶　　当番世話人 大友 邦

病理コメンテータ

野島 孝之（金沢医科大学）
蛭田 啓之（東邦大学医療センター佐倉病院）
元井 亨　（がん・感染症センター都立駒込病院）
山口 岳彦（獨協医科大学越谷病院）

抄 録 集

第1日目

1. Spontaneous healing of a bucket-handle lateral meniscal tear in a young boy

○Hirofumi Koike[1)] Tetsuji Yamaguchi[1)] Masataka Uetani[1)] Akihiko Yonekura[2)] Makoto Osaki[2)]

1) Department of Radiology
2) Department of Orthopedic Surgery
Nagasaki University School of Medicine

We report a rare case of an isolated displaced bucket-handle tear of the lateral meniscus in a 14-year-old boy that healed spontaneously without surgical intervention. The patient acutely injured his left knee while playing soccer and complained of painful swelling and locking of the knee. MRI performed at an orthopedic clinic showed a bucket-handle tear of the lateral meniscus. However, when he visited our hospital for an arthroscopic surgery at two weeks after the injury, he was free of knee pain and regained full range of motion. The follow-up magnetic resonance imaging showed reduction of the torn meniscal fragment without any signal changes suggestive of a meniscal tear. Arthoscopy showed a healed longitudinal tear involving the peripheral (red) zone of the lateral meniscus. This is one of the few reports of spontaneous healing and further studies are necessary to establish the prognosis of non-operative treatment of bucket handle tears.

2. MR imaging findings of pathologic mediopatellar plicae (medial patellar plica syndrome): arthroscopic correlation

○Tetsuji Yamaguchi[1)] Masataka Uetani[1)] Yasuhiro Kawahara[2)] Kazuhiro Yamaguchi[3)]

1) Department of Radiology, Nagasaki University Hospital
2) Department of Radiology, Nagasaki Rosai Hospital 3) Yamaguchi orthopedic clinic

【Objective】To evaluate diagnostic value of MRI in medial patellar plica (MPP) syndrome.
【Materials and methods】MRI findings of 22 subjects who underwent arthroscopic resection of medial patellar plica were evaluated. MPPs were characterized by Sakakibara classification, cartilage damage and inflammation of medial retropatellar fat pad on both arthroscopy and MRI.
【Results】Sakakibara classification of MPPs on MRI was matched with arthroscopic observation in 21/22 cases. Arthroscopy showed cartilage damage in 7/22 and inflammation of medial retropatellar fat pad in 9/22. MRI showed cartilage damage in 1/22 and high signal of medial retropatellar fat pad on FS-PDWI in 12/22.
【Conclusion】Although arthroscopic correlation was not obtained in all the cases, abnormal signal of medial retropatellar fat pad on MRI can be a finding indicating inflammation due to impingement of the fat pad. Further studies with control subjects are required to clarify the diagnostic value of MRI in MPP syndrome.

3. Clinical interpretation of the MR findings acquired by low-field dedicated machine for adolescent baseball players

○Yoshikazu Okamoto[1)] Manabu Minami[1)] Kenta Tanaka[2)] Takeshi Makihara[2)]
Tetsuya Kanahori[3)] Takashi Kawamura[3)] Kiyoshi Maehara[4)] Tomoko Tonoe[4)]

1) Department of Radiology 2) Department of Orthopedics
3) Faculty of Health and Sport Sciences 4) Doctoral Program in Sports Medicine
University of Tsukuba

The screening test for elbow injuries induced by baseball is performed by palpation and ultrasonography (US). The results on avulsion fracture of medial epicondyle show an approximately 20-30% positive rate, and osteochondritis dissecans (OCD) has a 1-2% positive rate.
In the previous conference, we reported on the preliminary results of the MRI screening used by a low-field extremity dedicated machine.
Although the subjects were from 9 to 12 years old, they were all (100%) successfully completed the exam.
The result were 0% on both avulsion fracture of medial epicondyle and OCD. However, injury of medial collateral ligament (MCL) reached 41.9%, which was markedly different from the previous reports using US and palpation.
We presented and compared the results of an advanced screening test including MRI, US, and palpation in 52 subjects.
In addition, we propose our original hypothesis “injury - adaptation group” theory observed only by MRI.

4. Anterior iliac lesion in three young male athlete

○Hisashi Tanaka Norifumi Naka Kenichiro Hamada Satoshi Takenaka Yoshinori Imura,
Yoshiyuki Watanabe Hiroto Takahashi Noriyuki Tomiyama

Departments of Radiology and Orthopedic surgery, Osaka University Graduate School of Medicine

Three cases fulfilled retrospective survey using key words “anterior part of iliac bone” and “under 20 years old” in MRI findings from around 95000 reports in ten years. All of these three cases are male with vigorous sports activity. In all three patients, band or mass like lesions exist at the anterior surface of iliac bone. On T2-weighted images, they showed high signal intensity. Two lesions showed high and the other lesion showed same intensity to muscle on T1-weighted images. Two patients have been observed for four years or three months without any change in imaging findings. No one underwent biopsy or treatment. Because of sex, age, and sports activity, authors believe avulsion mechanism of the iliacus muscle is the cause of these lesions.

5. Post-traumatic permanent dislocation of the patella in the left knee joint

○Masayuki Odashima[1)] Tsutomu Inaoka[1)] Tomoya Nakatsuka[1)] Rumiko Ishikawa[1)] Shusuke Kasuya[1)] Noriko Kitamura[1)] Hideyasu Kudo[1)] Koichi Isobe[1)] Koichi Nakagawa[2)] Nobuyuki Hiruta[3)] Hitoshi Terada[1)]

1) Department of Radiology 2) Department of Orthopedic Surgery 3) Division of Surgical Pathology
Toho University Sakura Medical Center

[Background] Permanent dislocation of the patella is a rare condition that is usually congenital in origin. However, permanent patellar dislocation may be acquired and this is usually secondary to knee trauma with subsequent malunion or growth arrest. Actually, traumatic patellar dislocation is treated early and appropriately and its occurrence of post-traumatic permanent dislocation of the patella may be low.
[Case report] A 42-year-old male who presented with muscle weakness and fatigue of the left leg was referred to our hospital. He had a traumatic event of the left knee in childhood. Clinical examination revealed a valgus deformity of the left leg and that the patella lay lateral to the lateral femoral condyle. Radiographs, CT, and MRI revealed patellar dislocation. CT revealed atrophic change of the left quadriceps femoris muscle and lateral dislocation of the tibial tuberosity.

6. A case of chronic expanding hematoma after total hip arthroplasty; Angiographic findings at preoperative embolization

○Haruto Sugawara[1)] Reiko Woodhams[1)] Kaoru Fujii[1)] Katsufumi Uchiyama[2)] Yusuke Inoue[1)]

1) Department of Diagnostic Radiology, Kitasato University School of Medicine
2) Department of Orthopaedic Surgery, School of Medicine, Kitasato University

A 72-year-old female had been suffering from swelling around the femoral head prosthesis for a year. Aspirate presented bloody fluid. Dynamic CT images showed a capsulated high density cavity with a gradual enhancement from the arteries around the hip joint into the cavity. Chronic expanding hematoma (CEH) was suspected based on the clinical and CT findings. TAE was requested to reduce intraoperative hemorrhage on revision arthroplasty. Angiograms from the internal iliac artery and the deep femoral artery showed proliferated arteries distributing on the capsule of the cavity. A carbon dioxide angiogram indicated extravasation into the cavity. TAE was performed using gelatin sponge and Microsphere. The total amount of intraoperative bleeding was 4000 cc. There were a few reports presenting angiographic findings of CEH. A preoperative angiography and TAE may be useful to assure the diagnosis of CEH, predict and reduce bleeding during operation.

7. MR findings of polymyalgia rheumatica; a case report

○Shinjiro Tojo Takeshi Fukuda Akari Sadaoka Takenori Yonenaga Kunihiko Fukuda

Department of Radiology, The Jikei University School of Medicine

Abstract: Polymyalgia rheumatica (PMR) is a chronic inflammatory disease that causes muscle pain and stiffness, especially in the shoulders and the hips, in elderly persons.

We present a case of PMR with literature review. The case is an 81 years old male patient who complained of myalgia of the both proximal femur. Blood exams revealed an increase of C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR).

On MR images, symmetrical synovitis in both hip joints were seen on gadolinium-enhanced T1-weighted image. High intensity of obturator externus muscle, adductor magnus muscle, and gluteus medius muscle were seen on STIR image, which were considered as extracapsular muscle edema and similar to enthesitis.

The clinical manifestations were not seen in both shoulders. However, clinical and laboratory findings were not compatible with other rheumatic diseases, including rheumatoid arthritis and spondyloarthritis. Steroid therapy was provided under a diagnosis of PMR, and clinical improvement was obtained.

8. CT and MRI demonstration of myopathic change in polyarteritis nodosa

○Kaoru Kitsukawa[1)] Keisuke Chihaya[1)] Yuki Saito[1)] Yasuo Nakajima[1)] Harunobu Iida[2)]
Hironari Hanaoka[2)] Masatomo Doi[3)]

1) Department of Radiology
2) Division of Rheumatology and Allergology, Department of Internal Medicine
3) Department of Pathology
St. Marianna University School of Medicine

Polyarteritis nodosa (PN) is a necrotizing vasculitis that involves medium- to small-sized vessels and typically affects multiple organs. We demonstrate a patient with PN who developed multiple muscle involvement that was identified using CT and MRI. A 70-year-old male presented with a two-week history of progressive pain and muscle weakness in both lower extremities. Physical examination showed grasp tenderness of the thigh and calf muscles and weakness of the quadriceps femoris, tibialis anterior, soleus, and gastrocnemius muscles bilaterally. Blood tests showed elevation of C-reactive protein (19.45mg/dl), creatinine phosphokinase (419U/L), and myoglobin (424ng/ml). CT demonstrated scattered low attenuation foci in muscles of the thigh and calf, and the iliopsoas muscle. MRI of the lower extremities showed multiple increased signal intensity lesions in the muscles on T2-weighted images and STIR images, suggestive of inflammatory changes. A muscle biopsy was performed on the thigh. The biopsy specimen revealed vasculitis with fibrinoid necrosis compatible with PN.

9. Dual-energy CT evaluation of psoriatic arthritis: initial experience

○Takeshi Fukuda[1)] Shinjiro Tojo[1)] Takenori Yonenaga[1)] Akari Sadaoka[1)] Kiyofumi Hagiwara[2)]
Kunihiko Fukuda[1)]

1) Department of Radiology, The Jikei University School of Medicine
2) Department of Rheumatology, Tokyo General Hospital of East Japan Railway Company

Psoriatic arthritis (PsA) is a seronegative inflammatory arthritis associated with psoriasis, and has a tendency to result in irreversible joint damage.
We performed dual energy CT with iodine mapping in four cases with PsA, one foot and 3 hands.
Abnormal contrast enhancement was present in the symptomatic joints in all four cases.
In two cases, follow up study was performed after treatment with biological agent.
In these two cases apparent improvement of contrast enhancement was present, which was in accordance with the symptom improvement.
Therefore, iodine mapping of dual energy CT can be used as an alternative imaging in patients where MRI is contraindicated.

10. Calcific periarthritis involving the left iliacus muscle: a case with “wandering calcification”

○Hajime Fujimoto[1)] Shinya Hattori[1)] Yoshihiro Kubota[1)] Katsuhito Shimoyama[2)] Masanobu Eguchi[3)]

1) Department of Radiology
2) Department of Orthopedic Surgery
3) Department of Pathology
Numazu City Hospital

A 68-year-old woman presented with left coxalgia of 6-months’ duration. Conventional radiograph of the pelvis showed a well-defined, oval-shaped calcification on the lateral aspect of the left femoral head. This finding was interpreted as calcific periarthritis. She underwent a conservative treatment, which failed to improve her symptom. The patient was referred to our hospital a month later. On the second radiograph, the calcification migrated caudally and overlapped with the lesser trochanter. CT revealed a tubular-shaped calcified structure along the left iliacus muscle. The lesion was surgically resected, and the specimen revealed a calcified mass in the muscle. Histopathological study demonstrated a conglomerated calcified structure with infiltration of lymphocytes and foreign-body giant cells and some fibrosis. These findings are consistent with calcific periarthritis.

11. Bone marrow lesions, subchondral bone cysts and subchondral bone attrition are associated with histological synovitis in patients with end-stage knee osteoarthritis: a cross-sectional study

○Akifumi Hagiwara[1, 2)] Anwarjan Yusup[3, 4)] Koji Kamagata[1)] Muneaki Ishijima[3, 5)] Haruka Kaneko[3)] Lizu Liu[3, 5)] Liang Ning[4)] Ryo Sadatsuki[3)] Shinnosuke Hada[3)] M. Kinoshita[3)] Ippei Futami[3)] Kazuo Kaneko[3, 5)] Shigeki Aoki[1)]

1) Department of Radiology, Juntendo University Graduate School of Medicine
2) Department of Radiology, Graduate School of Medicine, The University of Tokyo
3) Department of Medicine for Orthopedics and Motor Organ, Juntendo University Graduate School of Medicine
4) Research Institute for Diseases of Old Age, Juntendo University Graduate School of Medicine
5) Sportology Center, Juntendo University Graduate School of Medicine

[Objective] The aim of this study was to examine the osteoarthritis (OA)-related structural changes associated with histological synovitis in patients with end-stage knee OA.
[Methods] Forty patients with end-stage knee OA (female: 88%, mean age: 71.8y) were enrolled. All participants underwent 3.0-T MRI. The structural changes including cartilage morphology, subchondral bone marrow lesion (BML), subchondral bone cyst (SBC), subchondral bone attrition (SBA), osteophytes, meniscal lesion and synovitis, were scored using the whole-organ MRI scoring (WORMS) method. Synovial samples were obtained during joint replacement surgery. The association between the histological synovitis score (HSS) and WORMS was examined using Spearman's correlation coefficient.
[Results] Among the seven OA-related structural changes, the BML, SBC, SBA and synovitis were significantly associated with the HSS (r = 0.33, 0.35, 0.48 and 0.36, respectively), while others were not.
[Conclusion] The presence of BML, SBC and SBA was associated with histological synovitis in patients with end-stage knee OA.

12. Aiming for a shorter psoriatic arthritis MRI protocol: can contrast-enhanced MRI replace STIR for the detection of synovitis?

○Takenori Yonenaga[1)] Yasuyo Teramura[2)] Masato Matsushima[3)] Shinjiro Tojyo[1)] Akari Sadaoka[1)] Takeshi Fukuda[1)] Kunihiko Fukud[1)]

1) Department of Radiology, The Jikei University School of Medicine
2) Department of Radiology, National Defense Medical College
3) Division of Clinical Epidemiology, The Jikei University School of Medicine

Purpose To evaluate whether intravenous gadolinium contrast MRI (Gd MRI) can be eliminated by STIR when evaluating synovitis of psoriatic arthritis patients.
Materials and methods Finger joints MRIs of 12 psoriatic arthritis patients were evaluated by two readers for synovitis of the metacarpophalangeal, proximal interphalangeal and distal interphalangeal joints, according to the Psoriatic Arthritis Magnetic Resonance Imaging Scoring System (PsAMRIS). Scores of STIR were compared to scores of Gd MRI as gold standard.
Result Sensitivity to detect synovitis of STIR was 41%, specificity was 96%. Weighted kappa statistic was 0.43.
Conclusion Eliminating Gd contrast administration resulted in low sensitivity for synovitis and the weighted kappa statistic was low, indicating that Gd contrast administration remains essential for an optimal assessment.

13. A case of idiopathic spinal cord herniation with characteristic imaging findings

○Masanori Ishida[1)] Yusuke Sato[2)] Junko Nakamura[1)] Yo Fujimoto[2)] Jiro Morii[2)] Yusuke Nakao[2)] Shigeo Sano[2)] Makoto Watanabe[1)]

1) Department of Radiology 2) Department of Orthopedic Surgery
Mutual Aid Association for Tokyo Metropolitan Teachers and Officials, Sanraku Hospital

We present a case of a man in his 60's with a 6-year history of progressive numbness of the legs and walking disorder. MR images showed a focal anterior kink of the spinal cord at the T5-6 level, including focal thinning of the spinal cord and widening of the dorsal subarachnoid space. Adherence of the cord to the ventral dura and anterior epidural fluid collection were also observed. Consecutive CT myelograms depicted herniation of the left anterior portion of the cord. Spinal cord herniation (SCH) was suspected from these findings, and then defined as a final diagnosis after an operation. This case is thought to be idiopathic because of no past operative or traumatic history. SCH is a relatively rare disease characterized by herniation of the thoracic spinal cord through an anterior or lateral dural defect. We discuss the SCH mechanism and imaging findings with some literatures.

14. Stickler syndrome with cervical cord compression caused by dens deformity: a case report

○Sakai Masafumi[1)] Okamoto Yoshikazu[1)] Kamada Hiroshi[2)] Minami Manabu[1)]

1) Department of Radiology
2) Department of Orthopaedic Surgery
University of Tsukuba Hospital

A 2.5 year-old girl presented with limbs shortening, microglossia, cleft palate and bilateral hearing loss since birth. Radiography of the upper and lower extremities showed epiphyseal dysplasia with flattening. Based on the clinical findings and mutation in COL2A1 gene, she was diagnosed as Stickler syndrome. She also showed muscle hypotonia in the whole body and developmental delay of motor function. Head control was delayed.
Cervical radiography was performed on suspicion of cervical myelopathy. It suggested slight atlanto-axial dislocation. In cervical MRI, deformation of the dens was also seen with slight atlanto-axial dislocation. It caused canal stenosis and slight cervical cord compression at the level of the foramen magnum.
The prognosis of Stickler syndrome is generally favorable. However, we hypothesized that dens deformity could cause lethal condition because the dens with Stickler syndrome is associated with insufficient endochondral ossification, especially in the childhood.

15. A morphological classification for thoracolumbar transitional vertebrae.

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Both thoracolumbar and lumbosacral transitional vertebrae (TLTVs and LSTVs) pose a risk of significant clinical error. Prevailing morphological classifications for TLTVs are lacking, in contrast to those for LSTVs. Here we propose a TLTVs morphological classification consisting of eight models—"Type 1" to "Type 8"—. To build this classification, we defined four types of costal elements—"short-rib type", "lumbar-rib type", "normal-length rib", and "normal-transverse process"—. Eight models of TLTVs were determined according to their combinations. We verified our classification reviewing 300 whole-spine CT datasets. There were in total 49 (16.3 %) TLTVs. About half of them were "Type 4—bilateral lumbar-rib-type costal elements—", followed by "Type 3", "Type 2", "Type 1" and "Type 5". None of "Type 6", "Type 7", or "Type 8" was observed. Our first five models may suffice to categorize all the TLTVs.

16. Anomaly of the atlas and axis causing cervical myelopathy

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We present two rare cases of cervical canal stenosis caused by an anomalous articulation between posterior arch of the atlas and the hypertrophied lamina of the axis. The radiological characteristics, and histologic findings of surgical specimen will be discussed.

Case 1: 59 year old female complained of left neck pain and numbness of 2 months duration. A tumor of the cervical spine was suspected at the local hospital.

Case 2: 59 year old female presented with one month history of headache. CT scan obtained at local hospital revealed occlusion of left middle cerebral artery. She was scheduled for surgical treatment. She gradually developed bilateral hand and lower leg numbness and abnormality of cervical spine was suspected.

17. Arachnoid divertula with scalloping of the posterior aspect of the vertebral bodies.

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A 80's man presented with left leg weakness. MRI showed dural ectasia-like lesion with scalloping of the posterior aspect of the vertebral bodies from Th12 to L1. CT myelography and CSF flow imaging revealed CSF inflow to expanded dural sac.
Spine X-ray and CT showed diffuse ossification of the anterior longitudinal ligament, sclelosis of sacroiliitis joints, and osseous fusion of vertebral bodies and facet joints. Arachnoid divertula is a rare manifestation in patients with ankylosing spondylitis. Bony erosion in ankylosing spondylitis involved the posterior elements more often than the posterior aspect of the vertebral bodies.
Our case is suggestive of considering the mechanism of arachnoid divertula by visualizing CSF inflow.

18. A case report of calcium pyrophosphate dihydrate crystal deposition disease (CPPD) similar to Osteosarcoma

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Forty-two year old male presented with severe neck pain, numbness of left fingers and dizziness. On physical examination, there was not muscle weakness or atrophy of the left upper extremity. X rays of cervical spine showed radiolucent area with calcification in the lateral mass at level of C4 to C6. Furthermore, C6 vertebral body was collapsed. On CT examination, questionable calcification was present around left C5/6 facet joint and made left neural foramen narrow. C6 vertebral body showed collapse with osteolytic change. From these findings, we suspected osteosarcoma or crystal deposition disease such as CPPD. Open biopsy was conducted and pathological results were consisted with CPPD. CPPD occurs when crystals form deposits in the joint and surrounding tissues with unknown etiology. In cervical spine, Crowned dens syndrome is known well. Our case would be rare because CPPD mainly occurred at left C5/6 facet joint and involved C6 vertebral body.

19. Two Cases of Melanotic Schwannoma of the Lumbar Spine

○Maho Tsubakimoto　Tsuneo Yamashiro　Masahiro Okada　Sadayuki Murayama

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A melanotic schwannoma (MS) is a rare variant of nerve sheath neoplasm which is categorized as a benign tumor according to the WHO classification. Approximately 10% of MSs have malignant potential with distant metastasis or local recurrence after resection.

We managed two patients with MS in our institution. The patients had well-defined epidural masses in the lumber vertebral canal which had high intensity on T1WI and low-to-intermediate intensity on T2WI. Although the pre-operative diagnosis was uncertain, local tumor resections were performed for presumptive benign lesions. The lesions were histologically diagnosed as MSs post-operatively. One patient had a local recurrence and multiple lung metastases 5 years later, and the other patient had no recurrences for 1 year.

Although MS is regarded as a benign neoplasm, radical surgical resection with wide margins is recommended. To avoid recurrences, a pre-operative radiologic diagnosis is essential when encountering this rare and unique tumor.

抄 録 集

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20. A case of sinonasal inverted papilloma with ossification

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A 65-year-old man was refered to our hospital complaining of nasal congestion and rhinorrhea lasting for a year. Nasal endoscopy revealed a mass in the left nasal cavity. Computed tomography images showed soft tissue mass with ossification in the left nasal cavity expanding into the ethmoid and maxillary sinuses. Destructive change in the surrounding tissue was minimal.
Endoscopic tumor resection was performed.
Pathological examination showed islands of epitherial cells infolding into the stroma with ossification. Cytological atypia was absent.
Thus inverted papilloma with ossification was diagnosed.
Here we pesent an exremely rare case of inverted papilloma with ossification, whereas inverted papilloma in itself is basically a common benign tumor.

21. Bizarre parosteal osteochondromatous proliferation of the sternum

○Hideyuki Fukui Nobuo Kashiwagi Eisuke Enoki Yasuaki Nakajima Isao Numoto
Yuichi Wakabayashi Masashi Toguchi Nobuyuki Asato Miho Yamakawa Sung-woon Im
Tomoko Hyodo Yukinobu Yagyu Masashi Kumano Masakatsu Tsurusaki Izumi Imaoka
Mitsuru Matsuki Kazunari Ishii Takamichi Murakami

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Bizarre parosteal osteochondromatous proliferation (BPOP), so-called “Nora’s lesion” is benign reactive, but locally aggressive lesion which has high recurrence rate. This rare lesion usually occurs in the small tubular bones of the hands and the feet, our report of a 17-years-old man is the first case affecting the sternum. CT and MR findings were consistent with intricate internal content including chondromatous stroma and ossification, but unusual location made a preoperative diagnosis difficult.

22. MR imaging findings of pilomatricomas: a radiological–pathological correlation

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Purpose: To assess the correlation between MR imaging and pathological findings of pilomatricomas.
Material and Methods: MR images were obtained consecutive patients with histologically proven pilomatricomas. Images were retrospectively reviewed for size, signal intensity compared with skeletal muscles, enhancement patterns, and imaging findings.
Results: We included 11 consecutive patients with 12 histologically proven pilomatricomas. The maximum tumor diameter ranged from 7 to 32 mm (mean, 16.5 mm). On T2-weighted images, five tumors showed homogeneous hypointensity, whereas six showed reticular hyperintensity and one showed cystic hyperintensity. On fat-suppressed T2-weighted images, nine tumors showed reticular hyperintensity, eight showed ring-like hyperintensity, and five showed peritumoral fat stranding. On fat-suppressed gadolinium-enhanced T1-weighted images, one tumor showed no enhancement, whereas three showed reticular enhancement and five showed ring-like enhancement.
Conclusion: MR imaging features of pilomatricomas included reticular and ring-like hyperintensities on fat-suppressed T2-weighted images and reticular and ring-like enhancement on fat-suppressed gadolinium-enhanced T1-weighted images.

23. A case of solitary synovial chondromatosis arising in the gluteus maximus bursa

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Chondral tumors in soft tissue are referred to as soft-tissue chondromas or extraskeletal chondromas, or as synovial chondromatosis if they arise in synovial tissue. We report the case of a 29-year-old man with synovial chondromatosis, also called synovial osteochondromatosis, which appeared in a solitary and extra-articular form. On magnetic resonance imaging (MRI) and computed tomography, the central portion of the tumor showed similar characteristics to bone marrow, despite the absence of any connection to adjacent bone. T2-weighted imaging displayed marked peripheral hyperintensity consistent with a cartilaginous area. These findings suggested the presence of enchondral ossification and were similar to those of skeletal osteochondroma, with the exception of the absence of attachment to bone. MRI is useful for distinguishing solitary synovial chondromatosis from other lesions, such as myositis ossificans, extraskeletal chondrosarcoma and parosteal osteosarcoma.

24. A case of fibroma of tendon sheath with bone invasion in the wrist

○Yuko Ono　Yuko Fukuda　Hanae Okuda　Yoshihiro Nishiyama

Department of Radiology, Faculty of Medicine, Kagawa Universtity

Case: 40s female
CC: right ulnar side wrist pain
Present history: She had the right ulnar side wrist pain since 7 years. The pain and swelling had been getting worse for the past 3 years. Radiograph showed a soft tissue mass with bone destruction of the distal ulna and erosion of the triquetrum. MRI showed a well-defined mass, measuring 46 × 30 × 48 mm, surrounding extensor carpi ulnaris tendon that infiltrated ulna, triquetrum, slightly radius and lunate. The mass demonstrated low-iso signal intensity on T1WI, heterogeneous high signal intensity on T2WI/STIR and there was diffuse enhancement on gadolinium-enhanced image. FDG-PET/CT showed intense FDG uptake in the mass (SUVmax:7.99). Preoperative radiologic impression was tenosynovial giant cell tumor. Following surgical resection, histopathological examination revealed closely aggregated spindle cells in a collagenous matrix. Finally, the tumor confirmed as fibroma of tendon sheath.

25. Desmoplastic fibroblastoma of the hand; mimicking fibroma of tendon sheath.

○Yuko Fukuda　Yuko Ono　Hanae Okuda　Yoshihiro Nishiyama

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A 70s female presented with progressive right hand swelling over 2 years duration and complained of tenderness. At MRI showed right palm mass, measuring 4 × 3cm, iso intensity on both T1WI and T2WI. There was mild heterogeneous enhancement on post contrast imaging. FDG PET/CT image showed mild accumulation. Tendon sheath fibroma was suspected before the surgery. Surgical resection was performed. Macroscopically, it appears as whitish cut surfaces. Microscopically, the tumor presented a dense proliferation of collagenous fibers and sparsely distributed spindle-to stellate-shaped cells. The histopathology was characteristic of a desmoplastic fibroblastoma.
Desmoplastic fibroblastoma is a rare fibrous soft tissue tumor, benign but locally aggressive.
We present a rare case of desmoplastic fibroblastoma of the soft tissue of the hand.

26. A case of retroperitoneal schwannoma with ossification

○ Yusuke Toda　Yusuke Watanabe　Jin Hirakata　Noriko Kinukawa　Osamu Abe

Department of Radiology, Nihon University School of Medicine

A man in his 20s was noted to have an abdominal mass on health checkup and referred to our hospital. Abdominal CT revealed a large hypodense tumor containing scattered areas of calcification-like hyperdensity in the right retroperitoneal space. On MRI, the tumor was oval shaped and well encapsulated. It was hypointense on T1WI and heterogeneously hyperintense on T2WI, and showed heterogeneous enhancement on gadolinium-enhanced MRI. On opposed phase images, there were scattered punctate foci with signal loss corresponding to hyperdense areas on CT. Surgical resection was performed, and histopathological diagnosis was benign schwannoma with ossification containing fatty marrow.

Schwannomas often contain calcification, but ossification is an extremely rare degenerative change and there have been few reports that demonstrated ossification on diagnostic imaging. Here we report a case of retroperitoneal schwannoma with ossification containing fatty marrow demonstrated on CT and MRI.

27. A case of calcifying fibrous tumor arising in a scrotum

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Tokyo-kita Medical center

A case of calcifying fibrous tumor (CFT) arising in a scrotum of a 42-years old male who presented with a painless left scrotal mass of 15 years duration. Ultrasound revealed a well-circumscribed low echoic mass of 2cm in diameter. The tumor was clearly separated from the testis and epididymis on CT. It had scattered calcification and scanty enhancement. On MRI, it showed very low signal intensity on T2WI and intermediate signal intensity on T1WI. Contrast enhanced imaging revealed a low uptake of gadolinium. Local excision was performed. The cut surface was white, there was no bleeding or necrosis. Microscopically, the tumor was composed of hyalinized fibrotic tissue with scattered calcifications and a low cell density of interspersed spindle-like cells. We would like to report a rare case of CFT arising in a scrotum including reported CT and MRI findings and the differential diagnosis.

28. Transcompartmental spread of lipomatous tumors

○Michiko Suzuki[1)] Ehara Shigeru[1)] Tomohiro Suzuki[1)] Hiroshi Tada[2)] Yoshikuni Mimata[2)]
Takashi Satoh[3)]

1) Department of radiology 2) Department of orthopedic surgery 3) Department of pathology
Iwate Medical University

Soft tissue tumors usually localized in one compartment, but it may be spread into other compartment particularly in large malignant neoplasms. The objective of this study is to describe unusual extensive non-malignant tumors. This is a retrospective review of such cases in relatively low grade or benign lipomatous soft tissue neoplasms with transcompartmental spread. The imaging studies include CT and MR imaging in 3 cases: well-diffentiated liposarcoma involving pelvic cavity and muscle layer around the hip, lipoma involving the upper arm and axilla, and lipoma involving Haffa's fat pad and suncutaneous tissue around the knee. In conclusion, relatively low grade lipomatous tumors may spread over compartments.

29. Extraskeletal osteosarcoma of the lower leg in a young woman: A case report

○Yuko Harada　Masako Oosaki　Naofumi Matsunaga

Department of Radiology, Yamaguchi University Graduate School of Medicine

We report an instructive case of extraskeletal osteosarcoma of the lower leg in a 28-year-old woman with a progressive pain for six months. On unenhanced CT, an oval-shaped mass measuring 4cm in diameter was seen in the left soleus muscle. Marked calcification was not evident, and the mass was obviously separated from the tibia. On T2-weighted imaging, the tumor was well-defined and moderately hyperintense with a hyperintense foci. Edema-like hyperintense areas were seen around the mass. On post-contrast T1-VIBE imaging, relatively homogeneous and moderate enhancement was shown with peripheral hypointense rim and foci. The tumor was pathologically diagnosed as extraskeletal osteosarcoma on open biopsy. We also present follow-up imagings after chemotherapy with literature reviews.

30. Bednar tumor (pigmented dermatofibrosarcoma protuberans): a case report

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A woman in her 40s was referred to our hospital because of her back tumor.
Physical examination revealed a firm, round mass of 35 mm in diameter.
MRI scans showed a well-defined subcutaneous tumor in her back. Most of the lesion appeared hypointense on T1WI, mixed intensity on T2WI, and hyperintensity on DWI. Localized hyperintense area on T1WI was noted and which was not suppressed by fat-suppressed T1WI. The MRI findings were not specific and the tumorectomy was performed. On histopathological examinations, tumor was composed of oval to spindle shaped cells arranged in groups, fascicles storiform pattern. Macrophages with melanin were also seen. Pathological diagnosis was Bednar tumor (pigmented dermatofibrosarcoma protuberans).
Bednar tumor is a rare skin neoplasm, considered to be a pigmented variant of dermatofibrosarcoma protuberans. In this case, hyperintensity on T1WI might reflect the melanin and could be the key of correct diagnosis.

31. Pleomorphic hyalinizing angiectatic tumor in the right popliteal space with high FDG uptake.

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A 74-year-old woman was referred for evaluation of a right popliteal mass enlarging for 1 year. It did not cause discomfort. MRI revealed an irregular-shaped intermuscular mass which measured 18.2 cm in diameter. T1-weighted images showed low signal intensity. T2-weighted images demonstrated a heterogeneous pattern with mixed areas of high and low signal intensity. Dynamic contrast-enhanced MRI revealed an early peripheral and delayed central enhancement which were heterogeneous. The maximum standardized uptake value (SUVmax) on 18F-FDG-PET was 23.05. Malignant tumor was suspected and marginal resection was done. The tumor was characterized by clusters of dilated blood vessels and invasive growth of spindle cells including pleomorphic cells. Regional necrosis and mixoid changes were existed. Immunohistochemically, the specific differentiation was not detected. Pathological final diagnosis was Pleomorphic hyalinizing angiectatic tumor (PHAT). PHAT is a rare soft tissue tumor of low malignant potential. We discuss the imaging findings of PHAT.

32. Kaposiform hemangioendothelioma of the neck in a neonate

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Kaposiform hemangioendothelioma (KHE) is a rare locally aggressive vascular tumor of infancy and childhood. It is mostly located in the retroperitoneum and skin. We present the case of a newborn girl with a KHE occurring in the left neck. She was delivered through the vagina at 40 weeks' gestation and noticed left facial nerve palsy at birth. 22 days after giving birth, she was admitted with left neck swelling and thrombocytopenia. CT revealed an enhancing lobular soft-tissue mass measuring 41×32×30 mm in the left neck. The mass extended both intra- and extra-cranially with destruction of left temporal bone. MRI revealed a strongly enhancing mass with intratumoral hemorrhage. An open skull base biopsy was performed and proved a histological diagnosis of a KHE.

33. A case of primary Kaposiform hemangioendothelioma of bone: effectiveness of everolimus treatment

○Masaya Ishii[1)] Osamu Miyazaki[1)] Keita Terashima[2)] Atsuko Nakazawa[3)] Takako Yoshioka[3)]
Ayako Muto[1)] Reiko Okamoto[1)] Masayuki Kitamura[1)] Yoshiyuki Tsutsumi[1)]
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A seven-year-old boy without skin change, who had suffered from a prolonged pain of right leg since eleven-month-old, had been followed in the other hospital as chronic recurrent multifocal osteomyelitis (CRMO). Contrast-enhanced MRI showed abnormal map-like enhancement in metaphysis and epiphysis of the right distal femur, which extended to extraosseous soft tissue. This lesion progressed gradually. Biopsy of the right femur proved this lesion to be kaposiform hemangioendothelioma (KHE).
Everolimus, which is an inhibitor of mTOR and structurally similar to sirolimus, successfully decreased the tumor size and controlled the symptom.
Primary KHE of bone without cutaneous lesion is extremely rare and only some cases have been reported. Use of everolimus for KHE has not been reported although sirolimus, which is not approved in Japan, is known to be an effective drug for KHE.

34. A case of epithelioid hemangioma in the triquetrum

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A 40s woman presents to the hospital complaining of worsening of left wrist pain for one year. Plain radiograph and CT showed expansive osteolytic mass in the triquetrum, measuring 15 × 15 mm. MR showed low SI on T1WI, iso-high SI on T2WI, high SI on T2WFS and multilocular enhancement. FDG-PET/CT showed mild accumulation. Curettage was performed with bone graft packing. Microscopically, the tumor was composed of accumulation of epithelioid endothelial cells and increasing vessels with the expansion. Immunohistochemical staining revealed factor Ⅷ and CD31 positivity, and Ki-67 positive rate was less than 1%. It was diagnosed as epithelioid hemangioma. According to the 2013 WHO classification, epithelioid hemangioma of bone is recognized as an intermediate-grade vascular tumor. We report a case of epithelioid hemangioma in the triquetrum with some literature review.

35. Fibrocartilaginous Dysplasia: A case report

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Fibrocartilaginous dysplasia is a rare variant of fibrous dysplasia in which extensive cartilaginous differentiation is observed. We present a case of a 10-year-old boy with right hip pain. Initial radiographs of the right femur reve aled an expanded large lucent lesion, which was histologically confirmed as fibrous dysplasia. Over the course of 8 years, the patient underwent several osteotomies and screw fixation because of progression of femur deformity. At that time, the fibrous dysplasia involved the right pelvis, whole femur, tibia, and talus.

At the age of 18 years, the patient showed extensive right femur deformity. On T2-weighted MRI, the lesion appeared heterogeneous and well defined, with a relatively high signal intensity area inside the lesion. CT showed amorphous calcification in this area, which was suspected as a cartilage component. Curettage with fixation surgery of the lesion was performed, and presence of cartilage inside the fibrous dysplasia lesion was confirmed histologically.

36. A case of osteoid osteoma of the distal phalanx: painful enlargement of the toe

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Osteoid osteomas (OO) involving the phalanges are a rare occurrence. We report a case of OO of the distal phalanx of the toe. A 17-year-old boy presented with progressive, localized pain at the tip of the 4th toe of the left foot over one month. There was always pain, not especially at night. The distal segment of the toe showed a bulbous enlargement and the nail and soft tissue were hypertrophied. There was accompanying erythema and localized severe tenderness. There was no history of trauma.

Plain radiographs demonstrated a lytic bone lesion with a sclerotic rim, and MRI showed low-intensity core with bone marrow and soft tissue edema in the distal phalanx. Surgical resection was performed and the patient's pain resolved immediately after the operation. Histological examination revealed vascular fibrous tissue with spongious bone formation in the center, which was interpreted as an OO.

37. Imaging of Giant Cell Tumor of Bone after Denosumab Injection

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[Purpose]
To evaluate a change on the imaging of GCTB after the denosumab injection.

[Materials and Methods]
This retrospective study conducted 15 patients who have GCTB and treated using denosumab from November 2011 to August 2014. The patients comprised 9 men and 6 women with a mean age of 42 ± 14 years. All patients were diagnosed by a biopsy.

[Results]
Partial remission which showed more than 30% decrease in size was obtained in 2 cases and the other cases was evaluated as stable disease. All the tumor decreased in size. The size of the secondary cystic change decreased in 5 cases. Bone formation in the tumor was appeared in 6 cases.

[Discussion]
The GCTB decreased in size in all cases after the denosumab injection. However, how long the denosumab should be continued is still unknown.

38. Ewing sarcoma in phalanx: a case report

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We report a case of Ewing sarcoma of finger, which is a rare location. The patient was initially 9-year-old, and initial radiograph revealed only soft tissue swelling with no localized bone lesions. The patient was followed up with no biopsy, but, two years later, high grade osteolytic lesion of the phalanx was evident. Biopsy of the lesion at that time revealed Ewing sarcoma. The patient was performed chemotherapy, surgical resection of the tumor and reconstruction. Imaging features of high-grade tumor of uncommon location are presented.

39. Bone metastases from Head & Neck cancer. Retrospective analysis of Whole Body MRI (WB-MRI), FDG-PET and CT

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Bone metastases from Head & Neck Cancer (HNC) are rare condition and the radiological findings have not been well analyzed. We assessed ten cases of bone metastases from HNC (3 oropharynx, 2 salivary gland, one each of larynx, nasopharynx, hypopharynx, nasal cavity and primary unknown) retrospectively using whole body MRI, FDG-PET and CT. Six of our ten cases, either intratrabecular or subtle osteoblastic pattern are recognized diffusely in CT. In these 6 cases, these lesions are shown as high intensity on DWI and ADC values are less than 1.2 mm^2/sec. All six cases are squamous cell carcinoma (SCC). In the other four cases, osteolytic lesions are included. Two of them are adenoid cystic carcinoma of salivary gland.

Bone metastases from HNC, especially SCC, either intratrabecular or subtle osteoblastic pattern tend to be shown on CT and these lesions are shown as high signal on DWI and low ADC value.