於早期童年期過後淋巴增生導至回結腸腸套疊之多重探頭電腦斷層掃瞄術：兩病例報告 DN001-GI

Multidetector Row CT of Ileocolic Intussusception Caused by Lymphoid Hyperplasia after Early Childhood: two cases report

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PURPOSE: Over 95% of Intussusceptions are idiopathic (secondary to lymphoid hyperplasia) in the early childhood. A pathological lead point is considered if a patient is over 3 years old. We present two cases of idiopathic intussusception after the early childhood with computed tomography (CT) examination.
MATERIAL AND METHODS: A 13 year-old male patient suffered from right lower abdominal pain, diarrhea and mild fever for 2 days and was sent to our emergency room. Blood analysis revealed WBC=8260/μL with 19% band form and CRP=23.1mg/dL. Another 32 year-old man came to our emergency room with severe right lower abdominal pain, diarrhea and mild fever for 1 day. Blood analysis showed WBC=18400/μL. A series of imaging studies was obtained for both the patients.
RESULTS: For the first case, KUB showed no dilatation of bowel loop. Contrast-enhanced CT identified ileocolic intussusception with a short segment of dilated terminal ileum having homogeneous wall thickening. Enlarged mesenteric lymph nodes were seen in right lower quadrant. In the second case, KUB showed no specific finding. Contrast-enhanced CT demonstrated ileocolic intussusception with homogeneous wall thickening in a short segment of dilated terminal ileum. Small mesenteric lymph nodes were seen in right lower abdomen. Under the impression of a pathological lead point leading to the intussusception in the relatively old ages of the two patients, operation was performed. Surgical exploration unveiled ileocolic intussusception, and segmental resection of the terminal ileum and ascending colon was performed in both the patients. Pathological diagnoses were lymphoid hyperplasia involving the terminal ileum, appendix and ascending colon in both the patients and also including the lymph nodes in the first patient.
CONCLUSION: Over 95% of intussusceptions are idiopathic and over 90% are ileocolic type in the early childhood, especially between 6 months and 2 years old. Idiopathic ileocolic intussusception, although uncommon after the early childhood (as in our two cases), should be kept in mind for differential diagnosis if the CT reveals homogenous wall thickening of a segment of dilated terminal ileum with or without enlarged mesenteric lymph nodes in the case of intussusception. Conservative treatment and clinical follow-up may be necessary for the self-limited benign disease.

盲腸過誤瘤引發之盲－直腸型腸套疊 DN002-GI

Cecorectal Intussusception Induced by a Cecal Hamartoma

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Cecorectal intussusception, a variant form of intussusception, occurs when the cecum enter through the entire course of colon and reach to the rectum. This condition is rare but often associated with a pathologic lead point. Here, we reported a 13-year-old boy, featuring insidious abdominal discomfort and constipation for one month, who developed cecorectal intussusception. Before surgical intervention, multidetector-row computed tomography with reconstructed images demonstrated the route of cecorectal intussusception and identified a cecal fat-containing tumor as the lead point. The patient received surgical reduction with resection of the cecal tumor. Final pathogical diagnosis was a hamartoma of cecum. The relevant literature pertaining to this condition was reviewed, and the possible pathophysiology of the condition was discussed.

脾臟硬化性血管瘤樣結節性轉化：一多發性病例報告及文獻回顧 DN003-GI
Multiple Sclerosing Angiomatoid Nodular Transformation (SANT) of the Spleen: a case report and review of the literature

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INTRODUCTION: Sclerosing angiomatoid nodular transformation (SANT) is a newly recognized benign lesion of the spleen. Several cases are reported nowadays, and most of them are presented as a solitary lesion. Data on multiple SANTs are extremely rare.
MATERIALS AND METHODS: A 41-year-old man who was found to have splenomegaly and multiple splenic tumors by abdominal ultrasonography (US) incidentally. The US of upper abdomen showed several hypoechoic lesions with increased peripheral color flow. The computed tomography scan (CT) of abdomen revealed heterogeneous nodular and mass lesions with calcified spots peripherally. The diagnosis of SANTs was confirmed by pathologic assessments.
CONCLUSION: Multiple SANTs is rare. Due to different management between benign and malignant splenic tumors, it is crucial to recognize the benign ones. Multiple SANTs should be included in the differential diagnosis of multiple splenic tumors.

原發性大網膜惡性間質瘤誤爲大網膜惡性轉移：病例報告 DN004-GI
Malignant Mesothelioma of the Greater Omentum Mimicking Omental Carcinomatosis: a case report

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PURPOSE: Omental carcinomatosis is not uncommon. But we should include the primary omental mesothelioma in the differential diagnosis.
CASE REPORT: The patient was a 78-year-old Taiwanese man who presented with fever and obvious body weight loss around 7-8kg in recent two months. Abdominal computed tomography showed suspicious hepatic colon cancer with omental carcinomatosis.
RESULTS: Laparotomy revealed diffuse carcinomatosis over small intestine, mesentery, and omentum with involvement of right side colon. But the colon mucosa appeared intact without obvious abnormality. Microscopic findings revealed a multifocal and multinodular diffusely infiltrative tumor over omentum and mesocolon. Tumor is composed of biphasic high grade atypical spindle and epithelioid cells with frequent mitosis and tumor necrosis. Consistent with malignant mesothelioma.
CONCLUSION: Primary greater omental tumors are rare. The greater omentum can be found in any part of the abdomen and mimic neoplasms of any tissue or organ.

過去無腹腔內手術或發炎病史之沾黏性腸阻塞：病例報告 DN005-GI
Adhesion Ileus Occurred without Past History of Intra-abdominal Surgery or Infection: a case report

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INTRODUCTION: To discuss clinical course and image finding of a 79-year-old man of adhesion ileus without previous history of intra-abdominal surgery or infection.
CASE REPORT: The 79-year-old man had DM, CKD, hypertension and hyperlipidemia. He suffered from vomiting, abdominal fullness, and no stool passage for 2 days. No fever but leukocytosis, high CRP was also noted. KUB showed bowel loops dilatation and air-fluid level. Abdominal CT showed GB stones and small intestinal obstruction, with transitional zone at terminal ileum. No focal lesion was noted. No operation or intra-abdominal infection history was reviewed. Intra-operative results showed adhesion of terminal ileum to anterior wall, and fibrous band near terminal ileum causing external compression and stricture of terminal ileum.
CONCLUSION: The correct diagnosis of adhesions is important, accounting for whether therapeutic approach is indicated. However, diagnosis of adhesion before surgical survey may be difficult. In this case, CT showed a transitional zone without focal lesion. For the adhesive band is typically unidentified on CT, adhesion ileus is an exclusive diagnosis based on an abrupt change in bowel caliber without another cause of obstruction. Thus adhesion is still one of the differential diagnoses in this case even without history of intra-abdominal surgery or infection.

直腸類癌合併肝臟轉移與類癌症候羣：病例報告及文獻回顧 DN006-GI
Rectal Carcinoid Combined with Multiple Hepatic Metastases and Carcinoid Syndrome: a case report and review of the literature

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Carcinoid tumors are relatively uncommon neoplasms, occurring in 1.9 per 100,000 persons annually worldwide. Rectal carcinoids account for about 25% of gastrointestinal carcinoids and less than 1% of all rectal cancers.
In general, rectal carcinoid tumors appear to exhibit a low propensity to metastasize. Thus, they are associated with a favorable prognosis, as reflected by the small percentage of nonlocalized tumors.

Herein, we report a case of rectal carcinoid with multiple hepatic metastases. He was presented as carcinoid syndrome initially and multiple hepatic tumors were found at the clinic. After imaging and pathological study, he was diagnosed as rectal carcinoid.

We discuss the clinical features, imaging features and managements of rectal carcinoid with multiple hepatic metastases.

結腸淋巴癌引起腸套疊：病例報告 DN007-GI
Colon Lymphoma Causing Intussusception: a case report

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CASE PRESENTATION: A 63-year-old woman had suffered from epigastralgia for 3 months. Laboratory test showed anemia (hemoglobin, 6.1 g/dL). Abdominal ultrasonography revealed a mixed echogenic mass between the liver and right kidney. Computed tomography of the abdomen showed colo-colonic intussusception. Colonoscopy revealed a large fungating tumor nearly obstructing the ascending colon. A biopsy was done; the pathology report described an ulcer with fibrinoid necrotic debris admixed with bacterial clumps. A right hemicolectomy revealed a 4×2 cm polypoid tumor in the ascending colon with colo-colonic intussusceptions and enlarged regional lymph nodes. Immunohistochemistry diagnosis was diffuse lymphoma reactive for CD20, consistent with large B cell lymphoma.
DISCUSSION: In retrospect, the CT images revealed a lymphomatous mass of the colon which acted as the lead point with abnormal lymphomatous infiltration of intussusceptum wall. If the leading point pathology result is equivocal, re-biopsy should be done and the clinical manifestation should be reconsidered.

後腹膜腔脂肪肉瘤：病例報告 DN008-GI
Retroperitoneal Liposarcoma: a case report

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We present a case of a young man suffering from abdominal fullness and distension for 3 months. A large abdominal tumor was found by sonography. Computed tomography (CT) revealed a large (25x15 cmdiameter) tumor, which was significantly compressing the stomach and apparently occupied the entire left abdominal cavity. Although advanced primary gastrointestinal stromal tumor (GIST) or retroperitoneal tumor was inferred as the differential diagnosis, a definitive diagnosis was difficult using imaging alone. The patient took an operation and myxoid liposarcoma was revealed by pathologist.

腸氣囊病爲腹腔積氣的罕見原因：二病例報告 DN009-GI
Pneumatosis Cystoides Intestinalis as a Rare Cause of Pneumoperitoneum: two cases report

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PURPOSE: Pneumatosis cystoides intestinalis (PCI) is a rare disease and uncommon associated with massive pneumoperitoneum. We herein report two cases of PCI and present its clinical and imaging findings.
CASES REPORT: Case I. A 52-years-old male patient suffered from abdominal pain and distension progressively for 4 days. He was refered to our emergent department where plain film and abdominal CT examinations were performed. Case II. A 61-years-old female patient with medical history of peptic ulcer suffered from abdominal fullness for over one year and got worse recently. She was admitted via outpatient department for further evaluation.
RESULTS: Both cases presented pneumoperitoneum and distended bowel loops on plain films. The abdominal CT revealed numerous gas-filled cysts in falciform ligament, mesentery, and subserosal or submucosal wall of the small and large intesine, typical features of PCI. In addition, endoscopy and CT found gastric outlet obstruction due to chronic gastric ulcer on case I. Surgery is schedually planned for that. About case II, the laboratory tests revealed hypoalbuminemia, hypokalemia and hypocalcemia. She discharged after conservative treatment.
CONCLUSION: We should keep in mind that PCI can be easily diagnosed by the characteristic imaging findings even associated with pneumoperitoneum, which can eliminate unnecessary emergent surgery.

硬癌轉移到腸胃道在電腦斷層上以惡性標靶徵象表現：病例報告 DN010-GI
Scirrhous Metastasis to Gastrointestinal Tract with Malignant Target Sign at CT: a case report

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PURPOSE: To present the CT scan findings of malignant target sign in gastrointestinal tract in one case of gastric cancer with colon metastasis.
CASE REPORT: A 49 y/o male was a case of gastric cancer s/p subtotal gastrectomy and chemotherapy in our hospital for two years. This time he was admitted due to intermittent bloody stool for one month. Colonoscope study showed focal stenotic lesion over 60 cm areas and biopsy was done. The biopsy result showed adenocarcinoma. Under the impression of colon cancer, preoperative CT scan was performed. The CT scan showed segmental wall thickening in transverse and descending colon with target like appearance. Relative thickened inner wall with enhancement and narrowing of the intervening layer were found. Colitis was impressed at that time. But due to biopsy proved colon adenocarcinoma, the patient received radical left hemicolectomy and enteroclysis. The final pathological diagnosis was colon metastatic adenocarcinoma from previous gastric cancer.
CONCLUSION: Scirrhous type intestinal metastasis may show target like appearance in the involved GI tract and this is different from classic target sign from edematous cause. Disproportionate thickening of the hyperattenuated outer and inner layer will be observed. Careful observation and knowledge of the clinical history should remind us radiologist to distinguish it as a sign of metastatic disease.

胰腺實性假乳頭狀瘤合併肝轉移：病例報告 DN011-HP
Solid Pseudopapillary Tumor of the Pancreas with Liver Metastasis: a case report

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PURPOSE: To report a rare case of solid pseudopapillary tumor (SPT) of the pancreas with liver metastasis.
CASE REPORT: A 23-year-old female presented with intermittent epigastralgia for 3 years. Due to worsening symptoms, she came to another hospital. Blood workup was normal. Abdominal computed tomography (CT) showed a pancreatic head mass and a lesion at S4 of the liver. She was referred to our hospital.
RESULTS: At our hospital, repeated abdominal CT demonstrated a well-defined large cystic lesion (7cm) with solid component at pancreatic head and a small hypodense lesion (2.2cm) at S4 of the liver. Endoscopic ultrasound-guided fine-needle aspiration of the pancreatic head tumor revealed SPT of the pancreas. Ultrasound-guided biopsy of liver showed metastatic SPT. A Whipple operation with hepatectomy was then performed. The pathological examination confirmed SPT of the pancreas with liver metastasis.
CONCLUSION: SPT of the pancreas has been first described by Franz in 1959. SPT is a quite rare neoplasm and accounts for 1%–2% of all pancreatic tumors. SPT usually affects young women (9:1 female predominance; mean age: 25 years; range: 10–74 years). The classic CT features are a large well-encapsulated mass with varying solid and cystic components. Internal hemorrhagic cystic degeneration is diagnostic of SPT. Typically; it shows peripheral heterogeneous enhancement of the solid portion during the arterial phase and progressive nonuniform enhancement. Metastasis is uncommon and occurs in 7%–9% of the cases, mostly to the liver, omentum and peritoneum. Liver metastatic lesions may also have complex features similar to SPT of the pancreas. In conclusion, SPT should be considered in the differential diagnosis of pancreatic masses in young females.

卵巢靜脈症候羣：病例報告 DN012-GU
Ovarian Vein Syndrome Diagnosed by Delayed CT Scan: a case report

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A 46y/o female with mild intermittent right back pain and physical checkup showing liver tumors came to our department to have a CT scan for assurance.
IMAGE FINDINGS: CT performed with 50ml IV contrast and 15ml N/S depicted tiny hepatic hemangioma and HCC. On 5min delayed scan right upper ureter run behind right ovarian vein and was compressed and so right ovarian vein syndrome was diagnosed.
DISCUSSION: Ovarian vein syndrome is rarely diagnosed. It may cause chronic back pain. The pain may worsen on lying down or between ovulation and menstruation when the vein becomes engorged. Right side is more common and it may increase the chance of urinary tract infection due to stasis.

醫學影像診斷陰囊膀胱疝氣 DN013-GU
Imaging Evaluation of Scrotal Bladder Hernia

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PURPOSE:
1. To describe the 64 raws MDCT appearance of the scrotal bladder hernia.
2. Review the literature of the scrotal bladder hernia.

CASE REPORT: Retrospect study a 49 years old male who was chief complain of left inguinal and scrotal marked swelling and intractable pain. The MDCT depicted a big cystic lesion with indirect herniation through the inguinal canal to the left side scrotum, no bowel or mesentery content; Static cystograms showed Urinary bladder herniation to the Lt inguinal canal and the left scrotum.

RESULT: He had received Left T.E.P hernioplasty (sidingmhernia with bladder wall inside)

CONCLUSION:
1. Scrotal herniation of the urinary bladder is rare. It is usually considered that 1-3% of all inguinal hernias involve the bladder.
2. Complications of herniation include possible upper tract obstruction and strangulation, infarction, and perforation of the bladder Tumors and calculi have been found within the herniated bladder.
3. Image evaluation of inguinal hernia is pre-operation necessary.

疑似腎細胞癌之非結石性局部黃色肉芽腫性腎盂腎炎 DN014-GU
Acalculous Focal Xanthogranulomatous Pyelonephritis Mimicking Renal Cell Carcinoma

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Xanthogranulomatous pyelonephritis (XGPN) is a rare and chronic granulomatous inflammation and classified as diffuse or focal type. The classical imaging findings include nephromegaly, absent or diminished excretion of contrast medium on urography, and renal calculi. With these typical findings, it is easy to make correct diagnosis of XGPN. However, preoperative diagnosis of focal XGPN is difficult because of radiological similarities to renal cell carcinoma. We report one case of a male who was subclinical and had a cystic tumor with enhancing thick wall in right kidney lower pole observed from the CT scan. The image feature of the renal cyst was consistent with Bosniak classification system category 4. Nephrectomy was performed under a tentative diagnosis of renal cell carcinoma, whereas histology demonstrated focal XGPN.

腎臟實質球狀血管瘤：電腦斷層、磁振造影和超音波影像表現 DN015-GU
Renal Parechymal Glomangioma: CT, MR, and sonography findings

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We present a rare case of renal parenchymal glomangioma in CT, MRI, and sonography findings in a 40 year-old asymptomatic man. A 40 year-old male had a history of type II DM, and asthma. He complained of fever and chill and liver abscess was diagnosed. A 2.8 cm right renal tumor was also incidentally found. Unenhanced computed tomography revealed a soft tissue mass, iso to hypoattenuation to renal parenchyma, located at interpolar region of the upper pole and the middle pole of the right kidney. No fat and calcification is not seen within the mass. Post contrast CT shows enhancement in corticomedullary phase with central hypodensity and washout in excretory phase to homogenous hypodensity. MRI shows homogenous hypointensity to renal parenchyma on T1WI and hyperintensity on T2WI. Postcontrast MR reveals peripheral enhancement with centripetal progression to uniform enhancement. The hyperechoic tumor with increased peripheral vascularity is seen in intra-operative sonography. Right partial nephrectomy was performed and the pathological report was glomangioma. Glomangioma, one of histologic variants of glomus tumor. It has similar imaging findings to other visceral glomus tumor. It can also mimic renal cell carcinoma when it occurred in the kidney. So glomus tumor should be one of the lists of differential diagnosis.

卵巢畸胎瘤合併類癌：病例報告及文獻回顧 DN016-OG
Primary Carcinoid Arising in a Mature Cystic Teratoma of the Ovary: a case report and review of the literature

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PURPOSE: Malignant transformation of mature cystic teratoma is a rare complication. While any of the constituent tissues of the teratoma has the potential to undergo malignant transformation. Carcinoid is low grade malignant tumors with neuroendocrine differentiation that most commonly occur in the gastrointestinal tract and bronchial system of the lungs. Herein, we present a case of primary carcinoid arising in a mature cystic teratoma of the ovary.
Case Report: We report a 71-year-old women presenting with lower abdominal fullness and a palpable pelvic mass.
RESULT: CT revealed a calcified hypervascular fat-containing mass in the right ovary. Right salphingoophorectomy was done and pathological examination revealed a mature cystic teratoma with insular type carcinoid tumor in the right ovary.
CONCLUSION: The carcinoid tumor would derive from neuroendocrine cells of the gastrointestinal and respiratory epithelium, which are components of the ovarian teratomatous lesion. We should keep in mind that the hypervascular component could be a hint of malignant transformation in the ovarian teratoma.

卵巢纖維瘤相關之 Meigs 症候羣：病例報告 DN017-OG
Meigs Syndrome associated with an Ovarian Fibroma: a case report

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The definition of Meigs syndrome is presence of ascites and pleural effusion that disappear after removal of a benign ovarian tumor. We report a 30- year-old young lady with a pelvic mass for 2 years. Moderate amount of ascites was found recently at gestational age of 8 weeks. Ultrasound showed a pelvic mass 4.7cm with a stalk and moderate amount of ascites. Noncontrast MRI of pelvis was done under consensus of pregnancy termination, showing 5cm low signal intensity mass in presacral space with a pedicle connecting to the left adnexa. Left ovarian fibroma is suspected with Meigs syndrome. The patient underwent laparoscopic surgery, left partial oophorectomy and D&C. Fibroma was proven by histopathologic findings and ascites disappeared after surgery. We report the relevant imaging findings for this case.

周邊血管畸形栓塞利用壓力計有效控制血流：三病例報告 DN018-IR
Angiographic Embolization of High Flow Peripheral Vascular Malformation with Assist of Manometer: three case reports and literature reviews

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High flow peripheral vascular malformation (PVM) is among the most challenging lesions for treatment. Reducing the blood flow through the nidus can extend the time for reaction between the inner surface of the nidus and the sclerosant, which increases the success rate. Transarterial embolization has many flow rate control methods including balloon occlusion, tourniquet, or coil or n-butyl cyanoacrylate embolization. We report three cases of PVMs using manometer to control the flow rate: 14-year-old girl with right calf PVM, 1-year-old male with left leg PVM and 10-year-old male with left ankle PVM. Although high flow PVM may be difficult to treat, adequate control of blood flow-rate will increase the successful rate.

中樞神經感染結核菌之放射線影像 DN019-BN
CNS Infected with TB and It's Radiologic Imaging

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PURPOSE: TB are still the most and the worst infectious disease these this day and past. Out of 1/3 world population were infected with TB. Then 2 percent infected will get this infected TB disease this year and two out of five are then died in this infected TB disease this year. TB who can affect the CNS systems will make this disease worsen and are become very difficult in diagnosis and treatment. That's why we have to discuss this disease and try to cure and stop this notorious disease.
MATERIAL AND METHODS: We are using plain films, CT, MRI and of course plain films are still the first priority to find the relationship with pulmonary TB and then judged by economic condition to use CT or MRI to find and to diagnosis this CNS disease. Finally are all is confirmed by the biopsy and cultured of this specimen.
RESULTS: MRI still is the best modality with no radiation, with sensitivity and specificity is quite high and far better than plain films and CT. and we are still working on molecular imaging to target on this disease to make sensitivity and specificity even better and quicker.
CONCLUSION: We will discuss with different modality imaging to diagnosis TB, its etiology, transmission, pathophysiology, and how to treat this disease, although there are still a lot of victims, we do have confidence in preventing and cured this disease. No more suffering of this disease from new vaccine invention and new drug and to eliminated this ugly disease.

鼻咽癌細胞株透過 IFN-gamma 調控進入腫瘤休眠狀態 DN020-BN
Tumor Dormancy Resulting From Subcutaneous Injection to SCID Mice with Cultured Nasopharyngeal Carcinoma Cells Is Mediated Via IFN-Γ Induction of a Highly Differentiated Phenotype

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The mechanisms underlying tumor dormancy in human primary lesions and bone marrow metastases of nasopharyngeal carcinoma (NPC) are still not completely understood. The aim of this study was to determine differences in the fates of cultured primary NPC (P-NPC) cells, interferon-γ-transduced primary NPC (IFN-γ-P-NPC) cells, bone marrow metastatic NPC (BM-NPC), and IFN-γ-transduced BM-NPC (IFN-γ-BM-NPC) cells following xenotransplantation into these four groups of SCID mice through subcutaneous injection of 5×10(6) cells/site/animal (4 animals/group). The injected mice were monitored for tumor development at the sites of injection. In only the group injected with IFN-γ-P-NPC cells, the resulting nodules remained small throughout the 60-day observation period after injection, but gradually became palpably prickly. Histopathological examination revealed that these lesions invariably consisted of mostly structures of horny pearls and keratin bridges with occasional apoptotic and degenerative cells. In contrast, animals injected with nontransduced-P-NPC cells developed tumors progressively with occasional central necroses. In the two groups injected with IFN-γ-NPC-BM and NPC-BM cells, progressive growths of tumors were noted, with the latter being at slightly faster rates, whereas the xenografts of both groups showed a poorly differentiated phenotype with abundant vascularity. The study results highlight the high susceptibility of P-NPC but not BM-NPC following IFN-γ gene transfer to the induction of tumor dormancy, which is mediated via induced cell differentiation. Thus, induced cell differentiation could provide a new mechanism by which tumor dormancy is induced.

電腦斷層血管攝影診斷之破裂腦室內動靜脈畸形 DN021-BN

CT Angiographic Diagnosis of a Ruptured Intraventricular Arteriovenous Malformation in a Teenager Playing Video Game

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Intraventricular arteriovenous malformation (AVM) is a rare congenital vascular disorder that is often associated with primary intraventricular hemorrhage (IVH) and a rapid clinical course. Acute imaging diagnosis requires depiction of both the location of hemorrhage and vascular nidus for emergent management. In this report, a 17-year-old teenager developed primary IVH with presentation of consciousness change during a video game. Multidetector-row computed tomographic angiography (CTA) demonstrated an AVM in the right lateral ventricle and its angioarchitectural relationship to the surrounding intracranial structures. Although selective angiography is essential both in planning treatment for cerebral AVMs and in establishing the final diagnosis, CTA can be an important first-line imaging modality to quickly confirm the diagnosis and hence initiate prompt management.

蝶鞍上海綿狀血管瘤：病例報告 DN022-BN

Suprasellar Cavernous Angioma: a case report

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Cavernous angiomas are not uncommon intracranial lesions, but they are rarely in suprasellar region. We present a case of pathologically proved suprasellar cavernous angioma with typical MRI features.

腦室內矽膠油 DN023-BN
Intraventricular Silicone Oil

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A 58-year-old woman was treated with left intravitreous silicone injection for retinal detachment. Precontrast CT scan done for frequent dizziness, shows extension of the orbital silicone into optic nerve. Two hyperdense nodules float in the right lateral and 4th ventricle respectively, which stay in the non-dependant portion of ventricles on both supine and prone positions. On T2W, the left orbital content and the intraventricular nodules all demonstrate chemical shift artifacts typically associated with silicone. The imaging findings are characteristic for intraventricular silicone after silicone oil tamponade.

雙能雙源電腦斷層診斷鎖骨下動脈竊血症候羣：病例報告 DN024-BN
Diagnosis of Subclavian Steal Syndrome by Dual-Energy CT Perfusion and CT Angiography: a case report

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PURPOSE: To present a case with left subclavian steal syndrome using dual-energy CT angiography and CT perfusion.
CASE REPORT: The 86 year-old man had no known underlying disease with totally independent daily activities. He suffered from sudden right limbs weakness while riding a bicycle. Then he was transferred to out emergency department. The neurological examination revealed mildly right hypoesthesia, slightly decreased muscle power of right limbs, and mild slurred speech. No headache, dizziness, diplopia, or chocking was complained of. Due to fear of ischemic stroke, CT angiography and brain perfusion were performed. The perfusion maps showed increased MTT but no decreased CBV at cerebellum and bilateral occipital lobes, findings suggesting of vertebrobasilar insufficiency. The CTA findings revealed stenosis at the orifice of left vertebral artery. Therefore, diagnosis of Subclavian steal syndrome (SSS) was made. Neurologist gave fluids supplement and aspirin for treatment for three days and then discharged with follow-up in neurology clinic. Interestingly, we also found the attenuation of left vertebral artery (VA) was lower than right VA on arterial phase image but higher than right VA on venous phase image, findings implying reversed blood flow from left vertebral artery due to SSS.
DISCUSSION: Traditionally, the diagnosis of SSS was made by demonstration of vertebral blood flow reversal in conventional angiography. Doppler ultrasonography of neck can help to determine the direction of flow in VA but cannot reliably image the proximal intrathoracic subclavian artery. We demonstrated a case with SSS diagnosed by combining CTA and CTP findings.

利用體積成像磁振造影來輔助單純皮質靜脈血栓之診斷：病例報告 DN025-BN
Diagnosis of Cerebral Isolated Cortical Vein Thrombosis Using Enhanced Volume MRI Images in Addition to Gradient Echo and MR Venogram: a case report

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The diagnosis of isolated cortical vein thrombosis is more difficult than dural sinus thrombosis both clinically and radiologically due to its non-specific and wide spectrum of clinical presentation. The image diagnosis of isolated cortical vein thrombosis can be easily overlooked by typical diagnostic approach for dural sinus thrombosis, usually including the application of magnetic resonance venography (MRV). There are indirect signs and findings that can guide towards the correct diagnosis, such as perifocal hemorrhage or infarctions, hypointensity on T2 gradient-echo of the thrombosed vein, focal lack of cortical vein signals on MRV, and focal venous congestion on conventional angiography. However, direct visualization of the thrombosed cortical vein, the "cord sign", is difficult due to the tininess of the lesion on a few key images, which can be easily overlooked by using tradition single- slice imaging protocol even with contrast enhancement. We report a case of a 48-year-old woman presented with repeated episodes left leg clumsiness and convulsion, in which initial MR study with MRV fails to clearly identify the thrombosed cortical vein. The diagnosis of isolated cortical vein thrombosis was later confirmed using contrast-enhanced volume MR images, which provides a clear and direct visualization of the "cord sign" in axial, sagittal, and coronal planes.

囊狀腦膜瘤：病例報告及文獻回顧 DN026-BN
Cystic Meningioma: a case report and review of the literature

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PURPOSE: To demonstrate a relatively rare case of cystic meningioma and discuss its distinctive imaging features to for differential diagnose from other cystic extraaxial tumors.
CASE REPORT: A young woman with cystic extraaxial tumor in right frontal lobe was presented. Histopathology finally proved as angiomatous meningiothelial meninigioma. The imaging characteristics of cystic meningioma help clarify from other dura-based neoplasms are reviewed from the literature.
RESULTS: A 33-year-old woman complained of diplopia and blurred vision for 6 days. Magnetic resonance imaging showed a dura-based neoplasm in the right frontal lobe with multiloculated cysts and intratumoral hemorrhage. Intense enhancement after intravenous contrast medium administration was demonstrated. Cystic meningioma was preoperatively diagnosed and pathology finally proved as angiomatous meningothelial meningioma.
CONCLUSION: In summary, presence of an extraaxial cystic neoplasm with hyperostosis, well-defined border and relatively mild perifocal edema would aid a correct preoperative diagnosis of cystic meningioma.

室管膜囊腫：病例報告 DN027-BN
Ependymal Cyst: a case report

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A 50-year-old male suffered from headache for several years. No trauma or operation history is noted. He has hyperlipidemia under medication for several years. Brain MRI showed a 5*4*4 cm thin-walled cystic like lesion in atrium of left lateral ventricle with mass effect to bilateral fornices, corpus callosum and internal cerebral veins. The cyst follows signal intensity change of cerebral spinal fluid without solid component. It is characteristic of an ependymal cyst which is rare and benign. The locations of ependymal cysts are usually in lateral ventricle or juxtaventricular region of the frontal, temporal and parietal areas. Typically there is no symptom, but symptomatic cysts may result in headache, seizure, gait disturbance, dementia which area related to obstruction of CSF flow or increased incracranial pressure. The differential diagnoses include choroid plexus cyst, neurenteric cyst, and neuroglial cyst. Choroid plexus cysts arise in choroid plexus glomus and are typically bilateral. Bright signal is commonly seen on DWI. Neurenteric cysts are found mostly in posterior cranial fossa with smooth, lobulated, and well-defined margin. Neuroglial cysts may occur anywhere in the neuaxis, especially the intraparenchymal location. Frontal lobe is the most common site.

皮樣囊腫破裂：病例報告 DN028-BN
Dermoid Cyst with Rupture: a case report

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A 26-year-old male patient presented loss of consciousness to ER department. The Glasgow Coma Scale (GCS) revealed E1V1M4. Brain CT showed a soft tissue mass with calcification in left lateral ventricle abutting left basal ganglion. Fluid-fluid levels in bilateral lateral ventricles with hydrocephalus were identified. Fat globules in bilateral subarachnoid spaces were noted. Brain MRI showed fat signal intensity in bilateral subarachnoid spaces and fat-fluid levels in bilateral ventricles. Pathologic reports revealed confirmed the diagnoses of a dermoid cyst with rupture. Dermoid cysts are rare primary intracranial tumors. They are about 4 to 9 times less common than epidermoid cysts. Larger size of dermoid cysts is associated with higher rupture rate. Chemical meningitis, seizure, coma, vasospasm, infarction or even death may be caused by rupture. Malignant transformation into squamous cell carcinoma is rare. It is crucial to differentiate fat density with air in brain CT scan. MRI with fat-suppression sequence is helpful to detect tiny droplets.

顱內低壓：病例報告 DN029-BN
Intracranial Hypotension: a case report

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A 29-year-woman suffered from sudden onset of headache in occipital and posterior neck areas, followed by vertigo and vomiting for 3 days. Associated symptoms included neck stiffness, tinnitus in right ear, soreness and pain at the nape. No trauma or operation history is noted. Lumbar puncture performed at ER revealed traumatic tapping. After admission, brain MRI showed subdural hemorrhage about 4 mm in thickness in bilateral frontal, parietal and temporal areas with diffuse dural thickening and enhancement. Bilateral lateral ventricles were small with medial deviation of choroids and internal cerebral veins caused by midbrain descent. Intracranial hypotension was diagnosed. Reduced pressure of cerebral spinal fluid (CSF) may be precipitated by operation, diagnostic lumbar puncture, vigorous exercise, or severe dehydration. Female is more involved than male. Intracranial hypotension should be differential from meningitis, metastasis, or idiopathic hypertrophic cranial pachymeningitis. In this case, it is arbitrary to conclude that lumbar puncture is the precipitating factor of intracranial hypotension. However, change in CSF pressure may be susceptive by this procedure. MRI is recommending as the first line examination rather than lumbar puncture for the reasons of non-invasiveness.

神經纖維瘤症第二型表現脈絡叢鈣化：病例報告 DN030-BN
Unusual Presentation of Neurofibromatosis Type Two with Choroid Plexus Calcification: a case report

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PURPOSE: We present an unusual case of neurofibromatosis type 2 with choroid plexus calcification.
CASE REPORT: A 51-year-old male has past history of left high frontal-parietal parafalcine meningioma status post craniotomy twenty years ago. Two years ago, he presented with loss of left vision and further MRI revealed recurrent parasagittal meningioma at bilateral occipital and left parietal regions. The second craniotomy was done and pathology proved recurrent meningioma. Meanwhile, contrast-enhancing mass lesion in the left internal auditory canal and middle ear cavity was also noted that suggested a vestibular schwannoma. Scattered recurrent meningiomas in the left frontal parasagittal, left occipital and left temporal regions were also depicted. Besides, dense calcification over left lateral ventricular choroid plexus unlikely the physiological calcification was noted.
RESULTS: According to the CT and MRI findings of hemangiomatosis and vestibular schwannoma, neurofibromatosis type 2 with unusual presentation of choroid plexus calcification is impressed.
CONCLUSION: Our case presentation has five year following-up with CT and MRI modalities, which would more clarify the unusual case with current updated CT and MRI images. By familiarizing radiologists with these image findings, it is hoped that unusual presentation of neurofibromatosis type 2 with choroid plexus calcification will be recognized earlier and appropriate management instituted in a timely fashion.

由原發胃癌引起的後顱窩可逆性腦病變：病例報告 DN031-BN
Posterior Reversible Encephalopathy Syndrome Related to Advanced Gastric Cancer: a case report

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Posterior reversible leukoencephalopathy syndrome (PRES) represents an uncommon entity associated with multiple etiologies: extreme hypertension, preeclampsia/eclampsia, and cyclosporine/tacrolimus neurotoxicity. PRES is characterized by reversible symmetrical vasogenic edema of brain, most commonly seen in bilateral parieto-occipital lobes.

We reported a 42-year-old female patent with freshly diagnosed as having poorly differentiated gastric adenocarcinoma with lymph nodes and bony metastases. Anemia, thrombocytopenia, acute impaired renal function, and disseminated intravascular coagulation (DIC) were developed during hospitalization. Consciousness deterioration was also noted. Standard chemotherapy with regimens of 5-fluorouracil (5-FU) and carboplatin were soon given.
MRI of brain revealed vasogenic edema over bilateral insular lobes, thalamus, midbrain, pons, right cerebellar peduncle, white matter of cerebellum and posterior putamen Besides, multifocal stenotic lesions at arteries of corresponding territories were also found at TOF-MRA. The tentative diagnosis was tumor related PRES, therefore, chemotherapy was continued. DIC and acute renal failure improved soon as well as her consciousness. Repeat MR after one month showed complete resolution of the lesions.

This is the first case of solid gastric cancer related PRES. We excluded the possibility of tumor metastasis, and chemotherapy related encephalopathy, The MR images in our case are uncommon, but typical PRES pattern mentioned in previous literature. Though hypertention/hyperperfusion theory is more common accepted mechanism in PRES, our case support the theory of toxicemia/hypoperfusion, which suggest circulating cytokine in blood attacked coagulation factor, renal glomerular endothelium and blood-brain-barrier, and resulted in DIC, acute renal failure and PRES at the same time. All these findings recovered after controlling the tumor indicate gastric CA is the source of circulating toxic cytokine.

頭皮創傷的罕見併發症：帽狀腱膜下膿腫 DN032-BN
A Rare Complication of Scalp Trauma: Subgaleal Abscess

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Scalp wound is usually self-limied. We reported a case of subgaleal abscess as a rare complication of scalp trauma. A 22 year-old male presented with pus drainage from the scalp wound after falling into a dirty ditch during a motorcycle accident 7 days before admission. Lab data showed normal WBC Count but elevated CRP level. CT scan revealed subgaleal abscess. Wound culture revealed mixed flora. Wound debridement combined with antibiotics was given. The causes of subgaleal abscess include sinusitis, fetal scalp monitoring, blood sampling and scalp trauma. Subgaleal abscess may result in cranial osteomyelitis, meningitis, sinus thrombosis, brain abscess and cause high morbidity and mortality. Prompt wound debridement and antibiotics treatment is necessary to prevent the complications.

肝腫瘤經動脈栓塞治療後大腦梗塞 DN033-BN
Cerebral Lipiodol Embolization after Transcatheter Arterial Chemoembolization for Hepatocellular Carcinoma

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Transcatheter arterial chemoembolization (TACE) is the recommended treatment for unresectable hepatocellular carcinoma (HCC). We presented here a case with rare complications of PLE and CLE after the 1st session of TACE. This case underwent the second session of TACE after completely recovery from neurological symptoms. The second session of TACE was performed with large-sized gelfoam cubes instead of the lipiodol-anticancer drug emulsion to minimize the risk of extrahepatic lipiodol embolization and there was not major complication afterwards.

利用磁振造影之動態血管攝影分析韋伯梅生症候羣之顱顏血管畸型: 病例報告 DN034-BN
Dynamic MRA in the Evaluation of Craniofacial Vascular Malformation Associated with Wyburn-Mason Syndrome: a case report

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Wyburn-Mason Syndrome (WMS) refers to a rare syndrome associated with multiple arteriovenous malformation (AVM) involving unilateral or bilateral craniofacial regions. The most common involved site is the orbit, followed by the brain. We present here a case of a 14-year-old woman with progressive blurred vision for more than one year. Abnormal vascular lesion was found on orbital fundus by indirect ophthalmoscopy. Then the dynamic Magnetic resonance angiography (MRA) was done which revealed multiple AVMs in bilateral retrobulbar spaces, especially in left side just along the optic nerve. Also there were same lesions in suprasellar cistern, including hypothalamus and optic chiasm region. Due to our dynamic MRA results consist with the conventional angiography finding of WMS. So a diagnosis of WMS was made by clinical manifestations and the characteristic appearance of the dynamic MRA.

原發性淋巴癌在海綿竇之磁振造影表現 DN035-BN
Primary Lymphoma of the Cavernous Sinus: MR Imaging in an Immunocompetent Adult

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Diffuse large B cell lymphoma over cavernous sinus refers to a rare presentation of an intracranial primary lymphoma in an immunocompetent adult. We present here a case of a 69 year old female who had no known underlying disease about immune system. Due to right side ptosis and facial numbness for 2 weeks, she came to our hospital for help. The MR imaging revealed an infiltrative lesion over right cavernous sinus surrounding the internal carotid artery. The lesion demonstrated homogeneously iso to hypo-intensity on T2WI and well enhancement after contrast injection. After surgical resection, the tissue pathology confirmed our diagnosis. We share this case to emphasize the typical appearance of the intracranial lymphoma, and the atypical location it may exist.

迷走神經副節細胞血管球瘤 DN036-HN
Glomus Vagale Paraganglioma

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INTRODUCTION: A paraganglioma is a rare neuroendocrine neoplasm that may occur at various body locations. About 97% are benign and cured by surgical removal. About 85% of paragangliomas develop in the abdomen; only about 3% in the head and neck region. Paragangliomas are described by their site of origin and are often given special names. The tumors are from vagus nerve, called vagal paragangliomas.
CASE REPORT: A 45 y/o female patient had chief complaint of left side lumping throat for several months. There was no dysphagia, no odynophagia or no gastroesophageal reflux disease. CT showed a well-enhanced mass in left carotid space. It displaced the ECA and ICA anteriorly. The jugular vein was compressed and displaced laterally. No splaying of ECA and ICA was found. MR demonstrated a mass with intermediate SI on T1WI, heterogeneous mild high SI on T2WI, flow void and strong enhancement. Operation was done later. Pathology showed glomus vagale paraganglioma.
CONCLUSION: The most frequent head and neck paragangliomas are carotid body tumors. Next most frequent are glomus jugulare tumors, which arise in the jugular fossa from paraganglia in the adventitia of the jugular bulb. Glomus vagale tumors are the third most frequent. Glomus bodies are found within the vagus nerve and its ganglia and beneath the perineurium. Most glomus vagale tumors manifest as a painless neck mass near the angle of the mandible. These are characteristic findings in CT and MR imagings. Pre-operation accurate diagnosis is accessible. Treatment is including surgery, embolization and radiotherapy.

眼神經神經鞘瘤：病例報告 DN037-HN
Schwannoma of Ophthalmic Nerve: a case report

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PURPOSE: To describe the imaging findings in a rare case of schwannoma of ophthalamic nerve.
CASE REPORT: A 65-year-old female suffered from intermittent pain in left side forehead and orbit, left side proptosis and impairment of visual acuity for 2 months. She came to our neurology department for help. There was no diplopia, no dysarthria, no dysphagia, no facial palsy or other neurological deficit. Myasthenia gravis was excluded after some initial examinations. Then, brain and orbit MRI were arranged.
RESULTS: The orbital MRI revealed a dumbbell-shaped, solid enhancing tumor mass extending from left side cavernous sinus through the superior orbital fissure into left side orbit. Under the impression of orbital fossa tumor, she was admitted to our neurosurgeon department for operation. Fronto-orbito-zygomatic craniotomy with tumor removal was performed. The intra-operative CT was done to accurately identify the tumor. The pathologic diagnosis was schwannoma.
CONCLUSION: Schwannoma arising from the 1st branch of the trigeminal nerve is very rare. Crossing over the superior orbital fissure is the key imaging finding.

蝶竇內血腫機化之影像：病例報告 DN038-HN
Image Findings of Sphenoid Sinus Organizing Hematoma: a case report

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Sinonasal organizing hematoma (OH) is a rare nonneoplastic benign condition that can be locally aggressive. To our knowledge, only one case of sphenoid sinus OH had previously been published. We reported two cases of sphenoid sinus OH presenting with and without vascular complication. In the patients with sphenoid sinus OH, angiography should be included to survey vascular damage before further management.

食道憩室於頸部超音波造成的診斷陷阱 DN039-HN
Killian-Jamieson Diverticulum: a potential diagnostic pitfall on neck sonography

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In the modern era, esophageal diverticula are being identified incidentally due to improved imaging modalities and increased frequency of imaging studies. Killian-Jamieson diverticulum is the less common outpouching emerging from the proximal cervical esophagus than Zenker's diverticulum. We present a case of a Killian-Jamieson diverticulum which was misdiagnosed on neck sonography in the first place, and a brief review about its mimics in neck region based on sonographic findings.

左耳增大前庭導水管症候羣：病例報告 DN040-HN
Larged Vestibular Aqueduct Syndrome of Left Ear: a case report

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A 9-year-old girl was brought to ENT OPD due to gradual difficulty in hearing. No systemic disease is noted. Lower lip laceration due to trauma about 10 months ago was noted. Hearing loss of left ear was identified clinically. Temporal CT without enhancement was done for further evaluation. Temporal CT revealed V-shaped enlarged bony vestibular aqueduct on left side up to 2.6 mm in transverse dimension, which was wider than posterior semicircular canal, indicating larged vestibular aqueduct syndrome (LVAS). LVAS is most common congenital anomaly of inner ear found by imaging. The most presentation is less than 10 years of age. Bilateral anomaly is more common than unilateral involvement. Sensorineural hearing loss often presents following head trauma. The diagnosis of LVAS is made if the transverse dimension of bony vestibular aqueduct half way up from opening is more than 1.5 mm. Associated abnormalities such as cochlear dysplasia, vestibular or semicircular canal anomalies if any should also be identified.

鼻竇 Ewing 氏腫瘤：病例報告 DN041-HN
Sinonasal Ewing Sarcoma/Primitive Neuroectodermal Tumor (EWS/PNET): a case report

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Sinonasal primary Ewing's sarcoma refers to a rare presentation of a head and neck primary tumor. We present here a 13-year-old boy who with a lesion on right maxillary sinus anterior wall with bone destruction and revealed a Ewing's sarcoma. There are several unusual features in the history and clinical course of this patient. Following biopsies, immunohistochemistry proved essential in distinguishing a Ewing's sarcoma from other small cell tumors. It is important that a seemingly common condition can be first presentation of less common, more sinister pathology.

外耳道腦膜瘤：兩病例報告及文獻回顧 DN042-HN
External Auditory Canal (EAC) Meningioma: two cases report and review of literature

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PURPOSE: To review the radiological findings and clinical keystones of external auditory canal meningioma.
CASES REPORT: One 52 year-old female and the other 44 year-old female had unilateral auditory discomfort for months. They both visited ENT OPD first. At physical examination, the former presented with a soft tissue mass over left external auditory canal. The latter showed conductive hearing loss on pure tone audiometry, which indicated middle ear effusion, but some soft tissue in the middle ear and part of external auditory canal noted while ventilation tube insertion. Both patients only underwent inner petrous CT scan before receiving ear mass resection, and took brain MRI after pathology proof of meningioma. Both brain MRI showed flat en-plaque intracranial meningioma with external auditory canal extension and adjacent vascular structures, bones and cranial nerves involvement.
RESULTS: In imaging aspect, CT scan of both cases revealed infiltrative opacification of the external auditory meatus and mastoid, with irregular shape of jugular foramen; both MRI showed en plaque well-enhanced mass lesions with temporal bone invasion, extracrainal extension, and surrounding neurovascular structures involvement. Histopathologies of our cases were meningotheliomatous and transitional type. About 20% of intracranial meningiomas eventually develop a extracranial extension, most commonly to the orbit. Following invasion of the temporal bone, the most common extension route is through the jugular foramina into the cervical, nasopharyngeal and retromaxillary spaces. Among the intracranial meningiomas, cerebello-pontine angle meningiomas have a tendency to involve the external auditory canal in the primary setting.
CONCLUSIONS: Primary EAC meningioma was rare, but we should be careful and looking for clues suggestive of secondary EAC meningioma. Initial inner petrous CT could provide the relationship between tumor and adjacent bony structures to differentiate from cholesteatoma. Further MRI scan will be indicated if aggressive bony involvement noted on CT for more details of tumor morphology/ enhancing pattern/ neurovascular involvement. Such patients will gain better treatment plan following complete imaging studies.

嗅神經母細胞瘤：二例病例報告 DN043-HN
Esthesioneuroblastoma: two cases report

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Esthesioneuroblastoma, also known as olfactory neuroblastoma, is a rare malignant neoplasm originating from olfactory epithelium. A 78-year-old man and a 58-year-old man presented to the outpatient otolaryngology clinic for nasal symptoms were found to have tumors within the nasal cavities on otolaryngologic examinations. Computed tomography (CT) showed enhancing masses with avid enhancement involving the nasal vault with destruction of adjacent bone. Magnetic resonance imaging (MRI) revealed the masses centered at cribriform plates with extension into orbits and into anterior cranial fossae. The diagnosis of esthesioneuroblastoma was confirmed by histopathological examination of the biopsy specimens.

胸椎動脈瘤樣骨囊腫：病例報告 DN044-SP
Aneurysmal Bone Cyst of Thoracic Spine: a case report

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A 32-year-old female came to our hospital due to back pain at level of lower thoracic spine for one month associated with numbness in bilateral lower limbs. Somatosensory evoked potential (SSEP) revealed prolonged latency of scalp sensory evoked potential to stimulation of right tibial nerve compatible with a clinical diagnosis of myelopathy. A plain film of thoracic spine revealed osteolytic change of T5 spinous process. MRI showed a 25*28*32 mm lobulated cystic mass with septations and fluid-fluid level at posterior spinal area T4-6 level causing spinal stenosis and bony destruction. Pathologic report shows aneurysmal bone cyst (ABC). ABC usually presents between the ages of 5 and 20 years, especially in females. Long tubular bones and spine are mostly involved. The thoracic and lumbar spines are the most common regions involved in spinal lesions. MRI demonstrates a classic fluid-fluid level, a characteristic but not specific sign. Spinal ABC has to be differentiated from osteoblastoma. ABC is more expansile than osteoblastoma. Recurrence rates are related to surgical approaches used. Radiation therapy is sometimes for inoperable lesions, especially in spine.

後天免疫缺乏症候羣的患者發現與神經瘤相似的脊髓硬膜外平滑肌瘤：病例報告 DN045-SP
Spinal Extradural Leiomyoma in a Patient with Acquired Immunodeficiency Syndrome Mimic a Neurogenic Tumor: a case report

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PURPOSE: We report a case of extradural leiomyoma occurring in a young female with acquired immunodeficiency syndrome (AIDS).
CLINICAL PRESENTATION: A 35-year-old female patient with AIDS presented with left upper back pain with radiation to left anterior chest for 1 year. Chest CT and thoracic magnetic resonance images revealed a mass located in left T4-5 neuroforamina and mediastinal lymphadenopathy.
RESULTS: CT guided-biopsy of mediastinal lymph node and pathology revealed necrotizing casseous granuloma related to TB infection. The patient underwent removal of spinal extradural tumor and left T4/5 hemilaminecotmy and pathology revealed leiomyoma.
CONCLUSION: Although metastasis, infection, lymphoma and neurogenic tumor are the most common extradural lesions affecting the spine, leiomyoma should be considered in the differential diagnosis of a spinal lesion in a patient with AIDS because of the hypothesis- the Epstein-Barr and AIDS viruses may be cofactors in smooth muscle tumor growth.

腦脊髓膜內低壓在脊椎磁振造影影像上的表現：病例報告 DN046-SP
Spinal MRI Imaging Findings of Intra-thecal Hypotension: a case report

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CASE REPORT: We present a 48 years old male with history of traumatic SDH post craniotomy and VP shunt insertion. The patient felt progressive tremor and rigidity for several months. Post traumatic Parkinsonism was impressed but C spine myelopathy also suspected due to increased upper and lower extremities DTR and C spine MRI without contrast medium was performed. Increased AP diameter of spinal cord and suspicious epidural collection with thecal sac compression noted. Spine and head MRI with contrast medium enhancement performed later. Typical even intra-cranial dural enhancement and prominent spinal epidural venous engorgement noted in the study and intra-thecal hypotension considered.
CONCLUSION: Intra-thecal hypotension is a syndrome of low CSF pressure characterized by postural headache, neck stiffness, nausea and vomiting. MR findings of head in intra-thecal hypotension include diffuse pachymeningeal enhancement, subdural fluid collections and downward displacement of the cerebral structures. However, imaging findings of spine of intra-thecal hypotension were less discussed and the diagnosis may be missed if the clinical presentation was not typical and only spinal MRI without contrast medium enhancement performed.

青少年濫操型橫紋肌溶解症：病例報告 DN047-MS
Exertional Rhabdomyolysis in an Adolescent: a case report

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PURPOSE: We report a case of rhabdomyolysis. We describe the clinical symptoms, laboratory and typical imaging findings, and discuss the etiology.
CASE REPORT: A 13-year-old boy with myalgia, who underwent excessive repetitive and strenuous squat jumps, performed as corporal punishment.
RESULT: Diffusely and homogeneously STIR-hyperintense change of bilateral vastus lateralis, medialis and intermedius muscles was noted in both thigh MRI series. The muscle enzymes (CPK, CK-MB, GOT, GPT) and serum myoglobin level were prominently elevated. The patient was adequately treated with good recovery.
CONCLUSION: The imaging findings and laboratory results were compatible with rhabdomyolysis. Avoidance of inappropriate corporal punishment is advised.

脛前黏液水腫之磁振造影表現 DN048-MS
MRI Findings of Pretibial Myxedema

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Thyroid dermopathy, often referred to as pretibial myxedema, encompasses approximately 0.5-4.3% of the subjects with Graves' disease and has been reported in euthyroid and hypothyroid patients. Although the lesions are most often pretibial, other affected have been rarely documented. In most cases, diagnosis of thyroid dermopathy is based on clinical history and physical examination. MRI features of Graves' dermopathy have been described but are not generally included in the workup process. Here we present a case of thyroid dermopathy and the classical findings on MRI study.

利用 UP-LN1 癌症細胞株之亞型飄浮非沾黏次型之 NK/LAK 抗性來評估激發癌症母細胞之機轉 DN049-OT

Induction of Metastatic Cancer Stem Cells from the NK/LAK-Resistant Floating, But Not Adherent, Subset of the UP-LN1 Carcinoma Cell Line By IFN-Γ

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As an advanced status of cancer stem cells (CSCs), metastatic CSCs (mCSCs) have been proposed to be the essential seeds that initiate tumor metastasis. However, the biology of mCSCs is poorly understood. In this study, we used a lymph node (LN) metastatic CEA-producing carcinoma cell line, UP-LN1, characterized by the persistent appearance of adherent (A) and floating (F) cells in culture, to determine the distribution of CSCs and mechanisms for the induction of mCSCs. F and A cells displayed distinct phenotypes, CD44 (high)/CD24 (low) and CD44 (low)/CD24 (high), respectively. The CSC-rich nature of F cells was typified by stronger expression of multiple drug resistance genes and a 7.8-fold higher frequency of tumor-initiating cells in NOD/SCID mice when compared with a cell. F cells showed a greater depression in HLA class I expression and an extreme resistance to NK/LAK-mediated cytolysis. Moreover, the NK/LAK-resistant F cells were highly susceptible to IFN-γ-mediated induction of surface CXCR4, with concomitant downregulation of cytoplasmic CXCL12 expression, whereas these two parameters remained essentially unchanged in NK/LAK-sensitive A cells. Following the induction of surface CXCR4, enhanced migratory/invasive potential of F cells was demonstrated by in vitro assays. Confocal immunofluorescence microscopy showed the two distinct phenotypes of F and A cells could be correspondingly identified in monodispersed and compact tumor cell areas within the patient's LN tumor lesion. In response to IFN-γ or activated NK/LAK cells, the CXCR4 (+) mCSCs could be only induced from the CSCs, which were harbored in the highly tumorigenic CD44 (high)/CD24 (low) F subset. Our results revealed the complexity and heterogeneity of the CSC of this cell line/tumor and the differential immunomodulatory roles of F and A cells. A better understanding of the interactions among different classes of CSCs and their niches may assist us in eradicating the CSCs/mCSCs through targeted immunotherapy, chemotherapy, or both.

電腦斷層導引穿刺腹主動脈瘤併血管內栓塞治療第二型滲漏 DN050-OT

Repaired Type II Endoleak by Trans-aneurysmal sac, Retrograded cannulation of Internal Iliac artery and Transarterial Embolization

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INTRODUCTION: The routes to treat type II endoleaks after endovascular aortic repair (EVAR) of infrarenal abdominal aortic aneurysms (AAA) including percutaneous transarterial and translumbar sac puncture. The standard EVAR procedure for AAA involving common iliac artery should embolized internal iliac artery firstly. But this issue is still controversy. We described a case of AAA involving whole segment of right common iliac artery (RCIA) after EVAR without embolized the right internal iliac artery (RIIA) firstly and resulting in type II endoleak from RIIA and progressive enlargement of aneurysmal sac.
CASE PRESENTATION: This 83 year-old male had the past history of AAA and RCIA aneurysm after EVAR with a bifurcated stent graft for 2 year at other hospital. He was sent to our ER due to abdominal fullness and dyspnea on exertion more severe recently. The computed tomography scan showed sac expansion and a type II endoleak arising from RIIA. The endoleak was accessed via direct punctured aneurysmal sac under sonographic and CT guidance and advanced a 4Fr arterial sheath into the aneurysmal sac. Aortography via left brachial artery revealed the endoleak from RIIA. After cannulated the RIIA with J curve catheter via the arterial sheath in the aneurysm, the RIIA was occluded with platinum coils and n-butyl cyanoacrylate coil embolization. Post-procedural non-contrast-enhance CT revealed no endoleak.
CONCLUSION: Our case describes a patient who presented type 2 endoleak arising from RIIA that was successfully repaired by percutaneous, trans-aneurysmal sac, retrograde cannulation of internal iliac artery and transarterial embolization.

POEMS 症候羣最初以顱內的血管瘤破裂呈現：病例報告 DN051-OT
The POEMS Syndrome with Initial Presentation of Ruptured Intracranial Hemangioma: a case report

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POEMS syndrome is a rare paraneoplastic syndrome due to an underlying plasma cell disorder, which is characterized by polyneuropathy, organomegaly, endocrinopathy, monoclonal plasmaproliferative disorder, and skin changes. We describe a 36-year-old man of POEMS syndrome with polyneuropathy, splenomegaly, IgA lambda plasmacytoma, hypothyroidism, hypogonadism, skin hyperpigmentation. The initial presentation of our patient was left ICH and IVH due to ruptured left parietal hemangioma s/p craniotomy and endoscopic hemostasis before 5 years with sequela of paraplegia and right upper limb weakness. He suffered from bilateral leg edema, massive ascites, and exertional dypnea which implied cardiovascular disease and pulmonary hypertention in recent half year. Chest CT images revealed diffuse lymphadenopathy at neck, axillary, para-aortic regions and multiple osteoblastic lesions in vertebrae, concluded to Castleman disease variant and osteoblastic myeloma. The reason for developing intracranial hemangioma in this patient remains unclear. One possible explanation could be an innate vulnerability of structures of ectodermal origin to vascular endothelial growth factor (VEGF) associated POEMS syndrome.