



STATdx

Quick, Confident Diagnosis.

Jasmine Tsai 蔡雅莉

Account Manager

0920321731

j.tsai@elsevier.com

Feature Highlights—Rely on the Experts

STATdx, written by renowned radiologists in each specialty, provides comprehensive decision support you can rely on, including:

- Over **200,000 image examples of X-ray, CT, MRI, and ultrasound**
- Over **4,300 common and complex diagnoses**
- More than **1,300 differential diagnosis modules**
- **300 comprehensive normal imaging anatomy**
- **20,000 easily-sortable patient cases**
- **195 basic and advanced intervention procedures**

STATdx 影像資料庫已訂閱客戶

STATdx 影像資料庫於全球有超過37000個用戶，於美國之學術單位更是全面訂閱，

STATdx

users = Over 37000

Cases = Over 20000

Images = Over 200000

100% of US Academic Programs are using STATdx

2015年4月份甫於台灣開始推廣，目前已訂閱之客戶如下：

台北榮民總醫院

台中榮民總醫院

萬芳醫院

馬偕醫院

新光醫院

童綜合醫院

奇美醫學中心

阮綜合醫院

Feature Highlights

1. RADTools (RADTools)

醫事放射師常用工具之彙整，包含TNM和癌症分期表等圖表，各式診斷程序，對齊角度之參考與分類資訊，以及各種計算工具。

2. 主題預覽 (Topic Previews)

在目錄、搜尋結果、以及診斷模組中瀏覽主題標題時，可預覽相關內容。

3. 隨時比較 (Compare Anywhere)

可並列對照兩個診斷影像以上，方便您快速而清楚的交互參考。

4. 簡報製作

每張圖片均可自動匯出成PPT，並附上圖片說明，讓您輕鬆準備演講題材。

5. 關鍵字 link out

搜尋關鍵字可串連至 Pubmed/radiology pdf/google

AMIRSYS STATdx 影像資料庫簡介



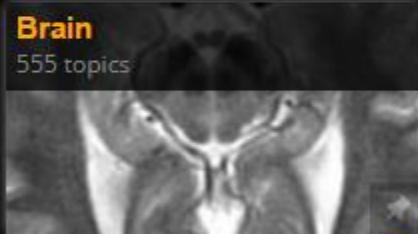
What are you looking for?...



Primary Categories

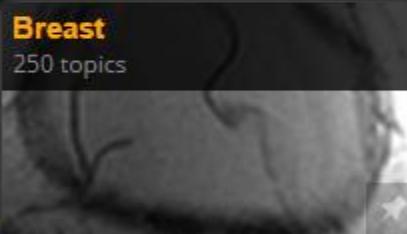
Browse by topic

6383 topics



Brain

555 topics



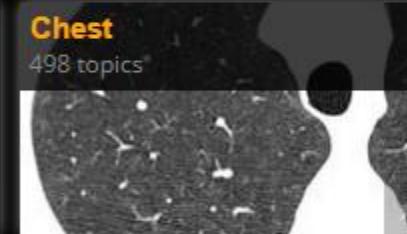
Breast

250 topics



Cardiac

139 topics



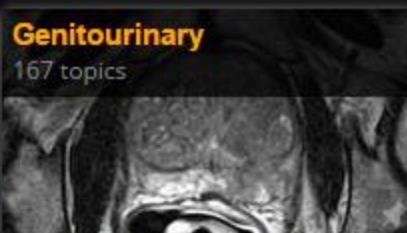
Chest

498 topics



Gastrointestinal

427 topics



Genitourinary

167 topics



Gynecology

198 topics



Head and Neck

667 topics



Interventional Radiology

153 topics



Musculoskeletal

799 topics



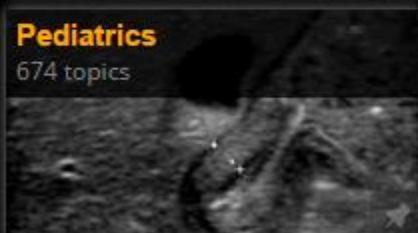
Nuclear Medicine

226 topics



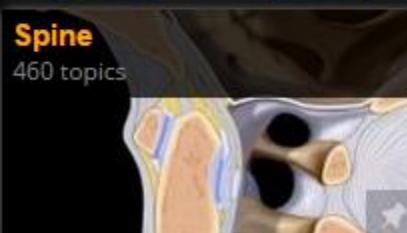
Obstetrics

371 topics



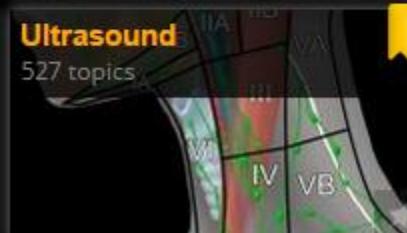
Pediatrics

674 topics



Spine

460 topics



Ultrasound

527 topics



Vasculature

60 topics



Search by keyword

STATdx® COPD 1. 下關鍵字 X  4. Bookmark list

Filter by Category 2. Filter 1

Cardiac

- All
- Brain
- Breast
- Cardiac
- Chest
- Gastrointestinal
- Genitourinary
- Gynecology
- Head and Neck
- Interventional Radiology
- Musculoskeletal
- Nuclear Medicine
- Obstetrics
- Pediatrics
- Spine
- Ultrasound
- Vasculature
- RADTools

Filter by Type ALL    

3. Filter 2 診斷 鑑別 診斷 組步驟

Search for Images 4 images

Adenosis, Sclerosing Adenosis, Microglandular Adenosis
Breast > Histopathologic Diagnoses > Benign Lesion...
Air Bronchogram
Chest > Diagnosis > Overview of Chest Imaging > Ill...
Air Trapping
Chest > Diagnosis > Overview of Chest Imaging > Ill...
Breast Overview
Breast > Anatomy and Normal Variants > Anatomy ...
Chiari 2
Brain > Diagnosis > Pathology-based Diagnoses > C...
Coronary Artery Territories
RADTools > Tables > Chest Tools > Coronary Artery ...
Dural-based Mass, Solitary
Brain > Differential Diagnosis > Meninges > Anato...
Gastric Cancer/Gastrointestinal Stromal Tumor
Nuclear Medicine > Gastrointestinal > Stomach > G...
Gastric Mass Lesions
Gastrointestinal > Differential Diagnosis > Gastroin...
Hip
Ultrasound > Anatomy > Lower Limb > Hip
Islet Cell Tumors
Nuclear Medicine > Gastrointestinal > Pancreas > Is...
Microcephaly
Brain > Differential Diagnosis > Scalp, Skull > Clinic...
Radial Head/Neck Fracture
Musculoskeletal > Diagnosis > Trauma > Elbow > O...
Sacral Teratoma

complicated by cor pulmonale have worse prognosis than those with disease not

... MD; John D. Grizzard, MD; Raymond J. Kim, MD

illness precipitating RHF (COPD, pulmonary embolism, etc.). Other signs/sympto

diogenic)

sa L. Rosado-de-Christenson, MD, FACP

cardiogenic edema; Typically absent in acute edema and COPD. Pleural effusion

5.其他參考資料超連結

RADsearch Didn't find what you were looking for? Try these resources:

Pubmed

Key Radiology Journals PDF Search

Google

Google Images
Google Scholar

Compare

比對不同的疾病診斷圖像

STATdx®

liver scar

X



Filter by Category

All

Filter by

STATdx®

Compare Diagnoses (3)

Exit Compare

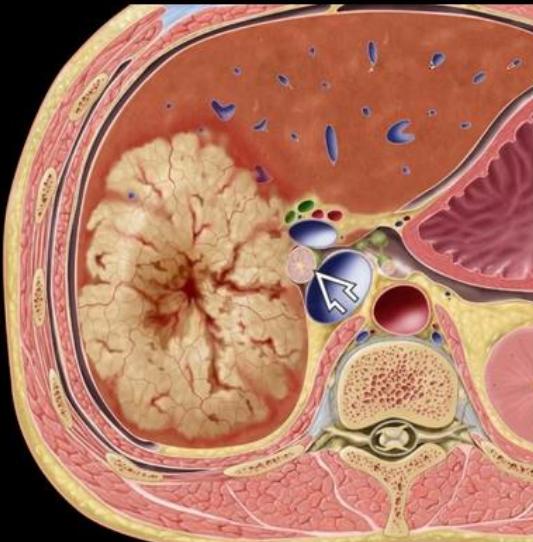
Search for "liver scar"

Fibrolamellar HCC

DISMIS

IMAGES

TEXT



Axial graphic shows a large, heterogeneous, hypervascular mass with a central scar and porta hepatis lymphadenopathy.

... Conventional HCC in noncirrhotic liver mimics FLC. **Hepatic** Cavernous Hemangioma. ... mass; Central decreased attenuation (scar), rarely with ...

Search for "liver scar"

Focal Nodular Hyperplasia

DISMIS

IMAGES

TEXT



Transverse ultrasound shows the lateral segment of the left lobe of the liver with bulging surface contours. The lesion is isoechoic to liver parenchyma making it difficult to detect.

Search for "liver scar"

Focal Nodular Hyperplasia

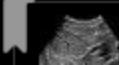
DISMIS

IMAGES

TEXT



Graphic shows a homogeneous, vascular, nonencapsulated mass with a central scar and thin radiating septa dividing the mass into hyperplastic nodules. Note the cluster of small arteries near the central scar.



dx Focal Nodular Hyperplasia

5 images : 4 references

URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1124714/



RAD Tools-Calculators

Calculators

	Ankle Fractures Calculator	1 image : 1 reference Updated 04/16/15	
	Bone Age Calculator	1 image : 2 references Updated 05/11/15	
	Bone Tumors Calculator	1 image Updated 05/11/15	
	Intracranial Cysts Calculator	1 image Updated 05/11/15	
	Lung Cancer Staging Calculator	1 image : 1 reference Updated 05/11/15	
	Pneumothorax Calculator	1 image : 2 references Updated 05/11/15	
	Radiation Dose Calculator	1 image : 1 reference Updated 05/11/15	
	Renal Insufficiency Calculator	1 image : 1 reference Updated 05/14/15	
	Solitary Pulmonary Nodule: Bayesian Method	1 image : 2 references Updated 05/14/15	
	Solitary Pulmonary Nodule: Gould Method	1 image : 1 reference Updated 05/14/15	
	Tumor Doubling Time: Diameter	1 image : 1 reference Updated 05/14/15	
	Tumor Doubling Time: Volume	1 image : 1 reference Updated 05/14/15	

RAD Tools-Tables

- ▶ AJCC Tables
- ▶ Neuro Tools
- ▶ Obstetrics Tools
- ▶ Chest Tools
- ▶ GI/GU Tools
- ▶ MSK Tools
- ▶ Pediatrics Tools

T1 Hyperintense Basal Ganglia

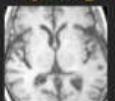
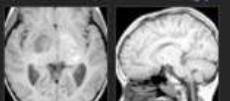
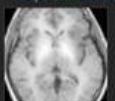
STATdx T1 Hyperintense Basal Ganglia X      

 Brain Differential Diagnosis Supratentorial Brain Par... Anatomically Based Diffe... Basal Ganglia, Thalam... T1 Hyperintense Basal ...

ddx T1 Hyperintense Basal Ganglia
Karen L. Saltzman, MD

COMMON

- Physiologic Calcification, Brain**

- Neurofibromatosis Type 1**

- Hepatic Encephalopathy**

- Hyperalimentation**


LESS COMMON

ESSENTIAL INFORMATION

Key Differential Diagnosis Issues

- Basal ganglia (BG) are paired deep gray nuclei & include caudate nuclei, putamen, & globus pallidus (GP)
- Lentiform nucleus: Putamen & GP
- Corpus striatum: Caudate, putamen, & GP
- BG T1 hyperintensity is usually symmetric, related to calcification (Ca++) or other mineralization

Helpful Clues for Common Diagnoses

- Physiologic Calcification, Brain**
 - Commonly affects GP more than putamen
 - Seen as normal variant in aging brain
 - Typically in patients older than 30 years
- Neurofibromatosis Type 1**
 - Focal areas of increased signal intensity (FASI) characteristic, T2 hyperintense
 - FASI occur in deep gray nuclei, GP most common
 - T1 hyperintensity in GP, thought to be related to FASI &/or mineralization
 - T1 hyperintensity increases with age, but may resolve by adulthood
- Hepatic Encephalopathy**
 - GP & substantia nigra (SN) hyperintensity
 - History of liver disease
- Hyperalimentation**
 - Abnormal manganese metabolism in patients undergoing parenteral feeding
 - T1 hyperintensity in GP & SN

Helpful Clues for Less Common Diagnoses

- Hypoxic-Ischemic Encephalopathy, NOS**
 - Includes anoxia, hypoxia, near drowning, & cerebral hypoperfusion injury
 - T1 & T2 hyperintense BG & cortical lesions

Key Facts

摘錄自AMIRSYS電子書系列的完整內容

STATdx 腦癌

Bookmarks Compare (0) Help/Support

KEY FACTS

Table

Imaging

Case Most are supratentorial

- Point of origin can often not be determined

Anatomy

- Often massive, filling entire cranial vault
- Gross distortion of cerebral architecture
- May extend through skull base into oral cavity

DD

- Macrocephaly and hydrocephalus common presenting signs
- Often exhibit rapid growth over short period of time
- Considerable overlap in appearance of tumor types
 - Differentiation between histologic types often not possible or even necessary
- Intracranial tumors have propensity to bleed
- Color Doppler essential to look for flow

Top Differential Diagnoses

- Intracranial hemorrhage
 - No flow with Doppler

Pathology

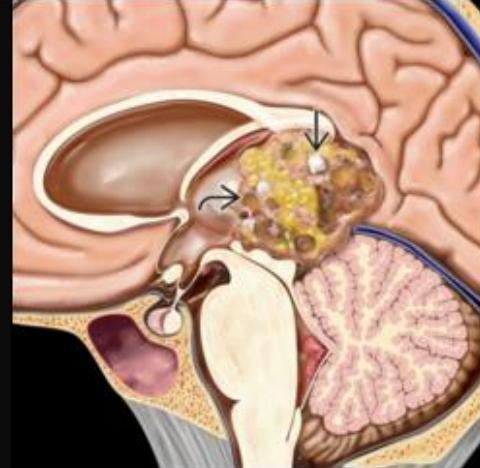
- Histologic types in order of occurrence

- Color Doppler essential to look for flow

Top Differential Diagnoses

- Intracranial hemorrhage
 - No flow with Doppler

Selected Images



Sagittal graphic shows a heterogeneous pineal region teratoma. There are cystic and solid areas within the mass. Calcifications are the most specific sign of teratoma but are not always present. Most fetal brain tumors are teratomas.

ddx Brain Tumor in Child > 1 Year

Brain by Susan I. Blaser, MD, FRCR

... with hemorrhage into tumor: Primary Tumor: Heterogeneous Intracranial

Script

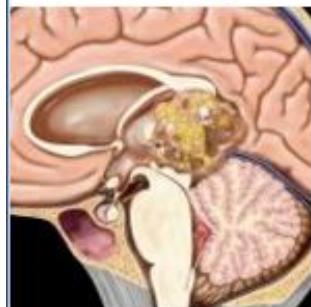


Parenchymal Brain Tumors

Paula J. Woodward, MD

Selected Images

[Hide Images](#)



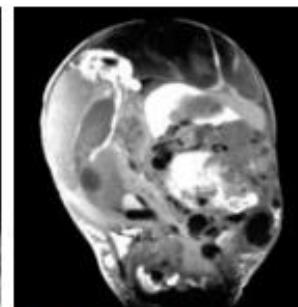
Sagittal graphic shows a heterogeneous pineal region teratoma. There are cystic → and solid areas within the mass. Calcifications → are the most specific sign of teratoma but are not always present. Most fetal brain tumors begin in the pineal region but grow so large that the point of origin is often not discernible.



Sagittal T2WI MR of a 3rd trimester fetus with a teratoma shows the mass → compressing the cerebrum → and stretching the brainstem →.



Transverse ultrasound of a fetal brain shows a large, heterogeneous mass within the cranial vault completely destroying normal anatomic landmarks. Measurements showed marked macrocephaly.



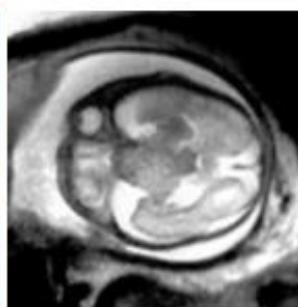
Postmortem coronal T1WI shows complete replacement of brain tissue by a complex mixed signal intensity mass. Immature teratoma with primitive neural ectodermal tissue, cartilage, bone, intestinal mucosa, smooth muscle, and hemorrhage → was identified at autopsy.



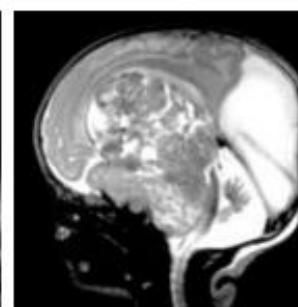
Transverse ultrasound of a fetal brain shows a mixed cystic and solid, echogenic midline mass →, which is causing obstruction.



Gross pathology in the same case shows a variegated, lobular mass → with marked thinning of the surrounding cerebral tissue.

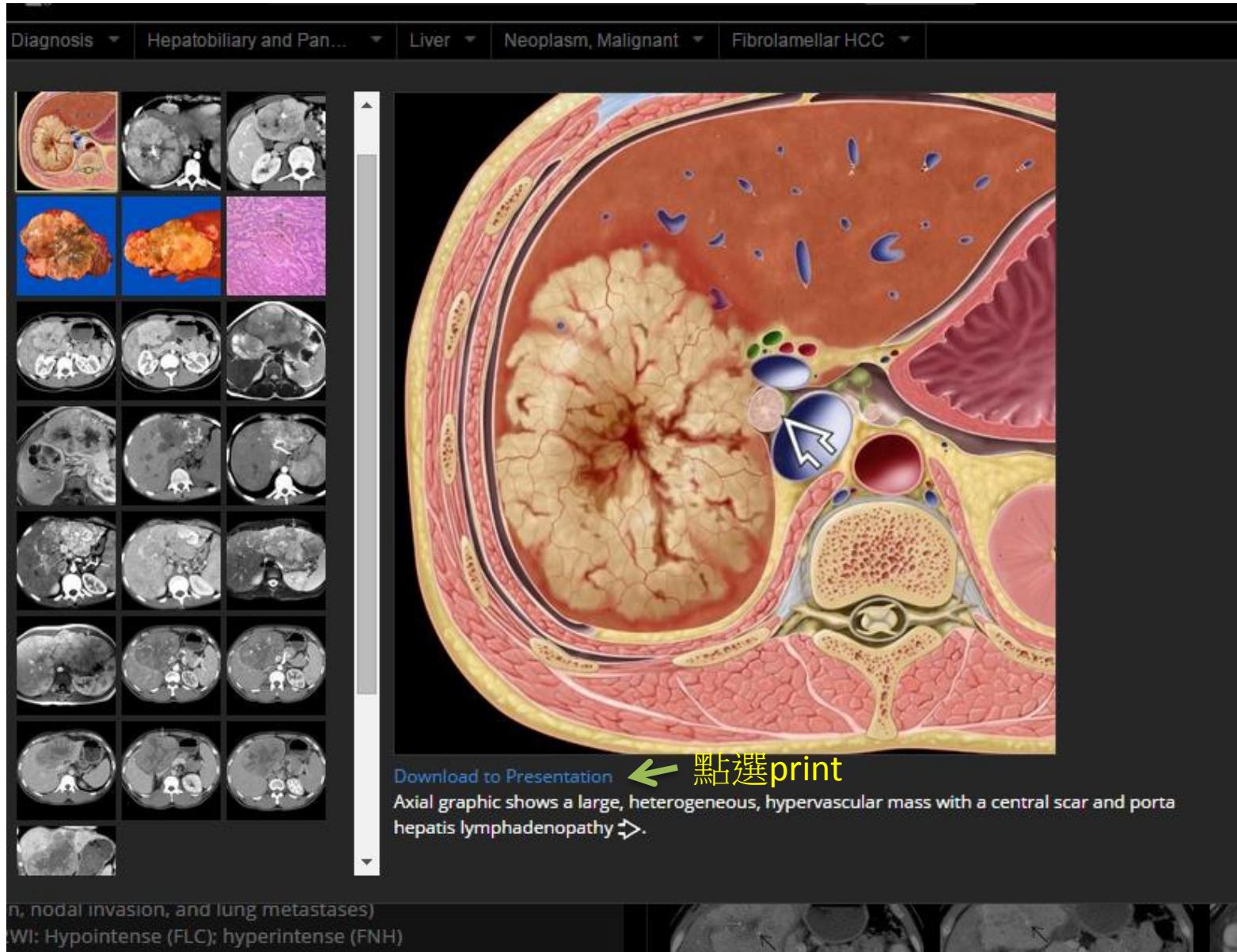


Axial T2WI MR of a 3rd trimester fetus shows a slightly hypointense, irregular, suprasellar mass →.



Sagittal T2WI MR on day 1 of life shows a large heterogeneous mass → with high signal cystic areas within it. The 3rd ventricle was

圖像自動轉存為PPT



Bone Age Calculator



What are you looking for?...



Bookmarks



Compare (0)

Help/Support

CME

Settings

Logout



Bone Age Calculator

Background Information

Assessment of a patient's bone age is frequently performed in children and adolescents in order to evaluate patient growth and to diagnose and manage certain pediatric syndromes or endocrine disorders. Advanced or delayed skeletal maturation can be determined using radiographic imaging of the hand and correlated with clinical course. This calculator provides a means of comparing the chronological age of a child to a standard atlas of skeletal development. Standardized values were compiled from studies compiled by Greulich and Pyle in which they assessed gender-specific skeletal age. These studies compiled mean skeletal ages for successive chronological ages by using between 68 and 201 subjects per age group.

Clues for assessment of hand-films:

- Infancy or early childhood: presence or absence of certain carpal/epiphyseal ossification centers -Puberty to late adolescence: degree of fusion of epiphyses with their shafts
- Assess bones in a regular sequence: distal ends of radius/ulna, carpal, metacarpals, phalanges
- Carpals should also be studied in regular order: capitate, hamate, triquetral, lunate, scaphoid, trapezium, trapezoid, pisiform

Step 1: choose the gender of the patient and input the chronological age in months

Step 2: scroll through a radiographic filmstrip of gender-specific images to find the closest match to your patient's radiograph



Step 3: the bone age and standard deviation of your study will be calculated and graphed on a skeletal age chart using standardized values from Greulich and Pyle
 Step 4: a blank standardized chart may be download and placed in a patient's file to chronicle the progression during subsequent imaging

Download blank skeletal age charts for patient's file (pdf):

[Male chart](#)

[Female chart](#)

Start by choosing the gender and inputting the chronological age of the patient in months

Gender

Chronological age (in months)

14

ex. 14 for 1 year, 2 months of age

[Continue to next step](#)

[References](#)

Elsevier's STATdx

- A diagnostic decision support system for radiologists



USE CASE
Lyme's Disease

Outline

- Lyme's Disease
 - Clinical History
 - MRI Findings
 - Navigating STATdx
 - Primary Differential Diagnosis
 - Reference Images
 - About STATdx

Clinical History

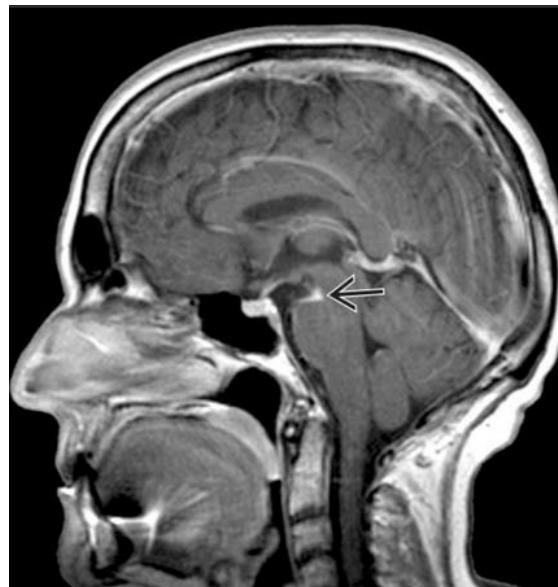
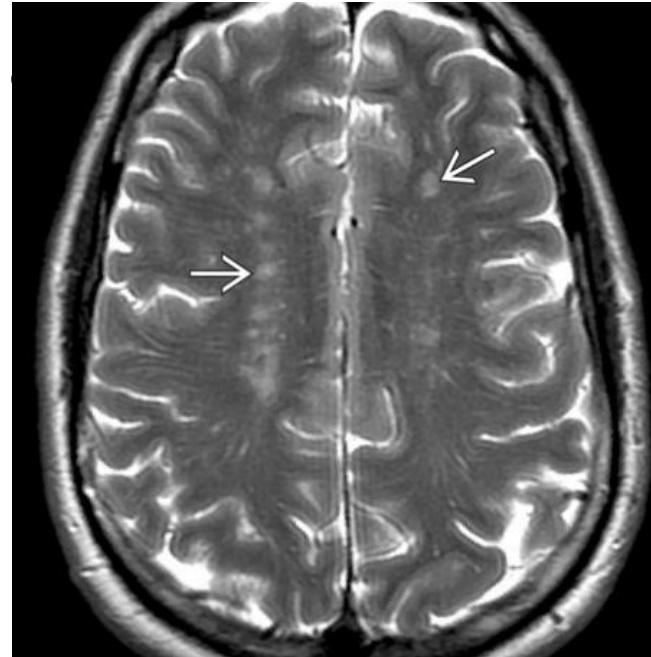
- 35-year-old woman complaints of weakness on one-side of the face after getting back from a camping trip
- Complaints also include severe headache, neck stiffness, fever, chills, muscle/joint pain and fatigue
- Patient presents with multiple erythema migrans (skin rashes), round, outwardly expanding rash ("bull's-eye")
- Patient's relative also complaints that this woman is having concentration difficulties and unable to remember certain information lately

Confirmation of diagnosis requires: ELISA,
PCR, MRI



MRI Findings.

- Axial FLAIR image demonstrates multiple foci of signal abnormality involving the periventricular white matter bilaterally.
- Contrast-enhanced axial T1WI does not demonstrate any enhancement.
- Contrast-enhanced, fat-suppressed axial T1WI demonstrates enhancement in the labyrinthine and anterior tympanic segments of the left facial nerve..



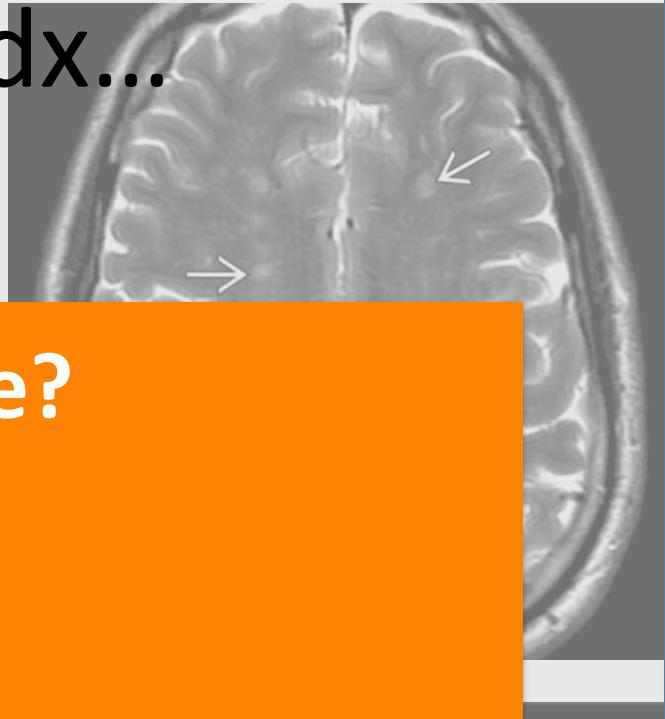
Navigating STATdx...

- Axial FLAIR image demonstrates multiple foci of signal abnormality involving the brainstem and cerebellum
- Consider Lyme disease
- Consider vasculitis
- Consider sarcoidosis

Lyme's disease?

Vasculitis?

Sarcoidosis?



1

Search function helps user find relevant content

2

Users may search by documents or images



lyme's disease

X



Bookmarks

Compare (0)

Help/Support

CME

Filter by Category

All

Filter by Type

ALL



Search for Images Instead



dx Lyme Disease

Brain | by Laurie A. Loevner, MD

... Lyme disease (LD), Lyme neuroborreliosis (LNB). Definitions. ... 30(6):1079-87, 2009; Kalina P et al: Lyme disease of the brainstem. Neuroradiology. ...

10 images : 6 references

Updated 3/12/10



ddx Multiple Brain Hyperintensities (T2/FLAIR), Rare but ...

Brain | by Gary M. Nesbit, MD

... Granulomatous Angitis; Lyme Disease; West Nile Encephalitis; Wegener Granulomatosis, Brain; Paraneoplastic Syndromes; Lymphoma ...

25 images

Updated 11/21/08



ddx Periventricular Enhancing Lesions

Brain | by Bronwyn E. Hamilton, MD

... Lyme Disease: Periventricular T2 hyperintensities + enhancement in ... identical to MS. Alexander Disease: ... nervous system diseases: a neurosurgical ...

21 images : 3 references

Updated 10/29/08



ddx Pial Enhancement

Brain | by Yoshimi Anzai, MD, MPH; Judy Tan, MD

... Rare but Important. Wegener Granulomatosis, Brain; Lyme Disease; Dural AV Fistula; Meningoangiomyomatosis; Neurocutaneous Melanosis. ...

20 images : 3 references

Updated 10/27/08



ddx Enhancing Cranial Nerve(s)

Brain | by Anne G. Osborn, MD, FACP

... Less Common. Viral, Post-Viral Neuropathy; Bell Palsy; Herpes Zoster; ADEM. Lyme Disease; Lymphoma; Neurosarcoid; Opportunistic ...

21 images

Updated 3/16/09



ddx Ring-Enhancing Lesions, Multiple

Brain | by Yoshimi Anzai, MD, MPH; Judy Tan, MD

... Rare but Important. Fungal Diseases; Parasites, Miscellaneous; Lyme Disease. Essential Information. Key Differential Diagnosis Issues. ...

20 images : 3 references

Updated 11/3/08



ddx Ring-Enhancing Lesions

Pediatrics | by Bernadette L. Koch, MD

... Aneurysm (Thrombosed); Other Infections: Tuberculosis; Fungal Diseases; Acquired Toxoplasmosis; Lyme Disease. Other Neoplasms: Parenchymal ...

15 images

Updated 11/8/10



Click the "Preview" icon to preview an item's content.

Primary Differential Diagnosis?

Demyelinating disease

Vasculitis

Sarcoidosis

Chronic fatigue syndrome

Filter by Category

All

Filter by Type

ALL

Search for Images Instead

**dx Lyme Disease**

Brain | by Laurie A. Loevner, MD

... Lyme disease (LD), Lyme neuroborreliosis (LNB). Definitions, Epidemiology, Clinical Manifestations, and Management. Radiology 251:1079-87, 2009; Kalina P et al: Lyme disease of the brainstem. Neuroradiology. ...

**ddx Multiple Brain Hyperintensities (T2/FLAIR)**

Brain | by Gary M. Nesbit, MD

... Granulomatous Angitis; Lyme Disease; ...

**ddx Periventricular Enhancing Lesions**

Brain | by Bronwyn E. Hamilton, MD

... Lyme Disease: Periventricular T2 hyperintensities. Neurosurgical ...

**ddx Pial Enhancement**

Brain | by Yoshimi Anzai, MD, MPH; Judy Tan, MD

... Rare but Important. Wegener Granulomatosis, Brain; Lyme Disease; Dural AV Fistula; Meningoangiomyomatosis; Neurocutaneous Melanosis. ...

**ddx Enhancing Cranial Nerve(s)**

Brain | by Anne G. Osborn, MD, FACP

... Less Common. Viral, Post-Viral Neuropathy; Bell Palsy; Herpes Zoster; ADEM. Lyme Disease; Lymphoma; Neurosarcoid; Opportunistic ...

**ddx Ring-Enhancing Lesions, Multiple**

Brain | by Yoshimi Anzai, MD, MPH; Judy Tan, MD

... Rare but Important. Fungal Diseases; Parasites, Miscellaneous; Lyme Disease. Essential Information. Key Differential Diagnosis Issues. ...

**ddx Ring-Enhancing Lesions**

Pediatrics | by Bernadette L. Koch, MD

... Aneurysm (Thrombosed); Other Infections: Tuberculosis; Fungal Diseases; Acquired Toxoplasmosis; Lyme Disease. Other Neoplasms: Parenchymal ...

Information can also be
filtered by diagnosis/
differential diagnosis

3

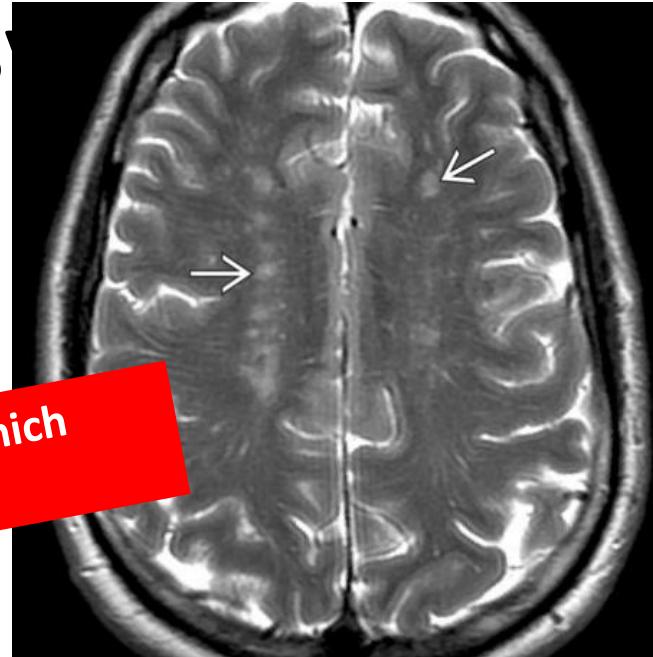
More features like
“compare” – to compare
diagnosis

4

Decision support systems

- Axial FLAIR image demonstrates multiple foci of signal abnormality involving the periventricular white matter bilaterally..
- Contrast-enhanced axial T1WI demonstrates enhancement in the labyrinthine and anterior tympanic segments of the left facial nerve..

Unique imaging clues help radiologists choose which diagnoses to consider and compare



Diagnosis: Lyme's Disease



Each diagnosis topic includes patient cases:

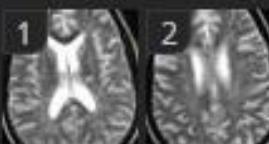
Each case includes demographics, history, case description, and the author/contributor.

The Description includes the author notes and annotations for the case.

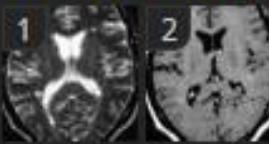
All cases include numerous labeled images.

PATIENT CASES: TYPICAL

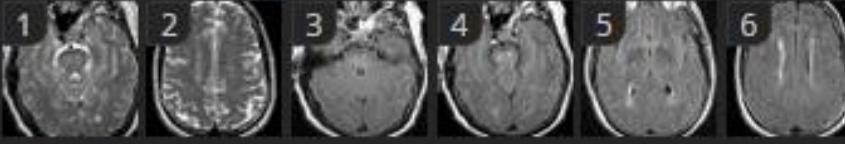
Multifocal white matter 2 images



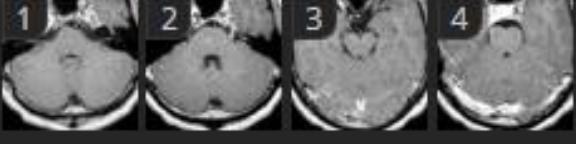
Enhancing parenchymal lesions 2 images



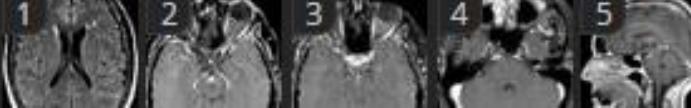
Multiple enhancing CNs 16 images



Cranial nerve, parenchymal lesions 4 images



Classic, meningeal and brain involvement 5 images



About STATdx

A point-of-care diagnostic decision support system for working and studying radiologists.

STATdx increases speed, accuracy and confidence in diagnosing complex imaging cases

More than 4,000 diagnoses written by the world's leading experts in radiology

STATdx includes over 1,000,000 images, including x-ray, CT, MR and ultrasound images

Nearly 20,000 supporting individual patient cases, authored by world-renowned experts in radiology

Unique 'Compare' feature allows a side-by-side comparison of up to three diagnoses simultaneously

