



STATdx

Quick, Confident Diagnosis.

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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

STATdx

What are you looking for?...



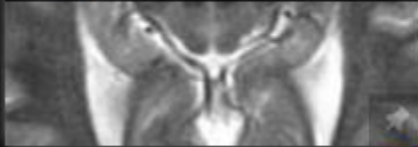
Primary Categories

Browse by topic

6383 topics

Brain

555 topics



Breast

250 topics



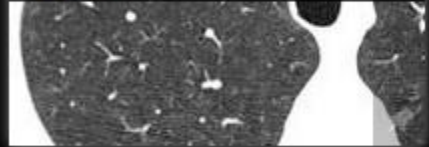
Cardiac

139 topics



Chest

498 topics



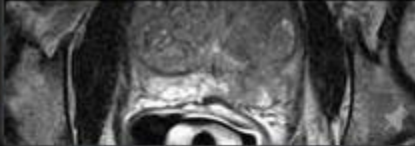
Gastrointestinal

427 topics



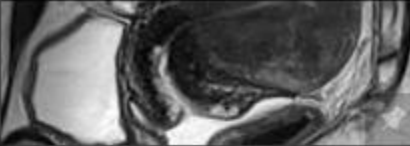
Genitourinary

167 topics



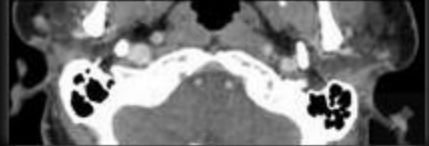
Gynecology

198 topics



Head and Neck

667 topics



Interventional Radiology

153 topics



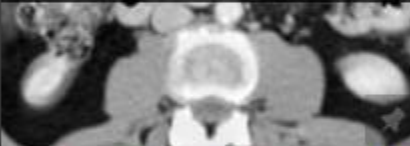
Musculoskeletal

799 topics



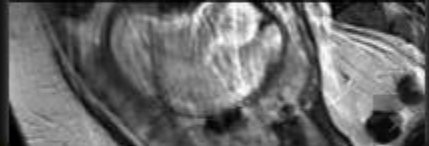
Nuclear Medicine

226 topics



Obstetrics

371 topics



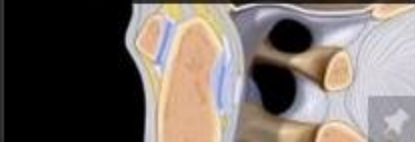
Pediatrics

674 topics



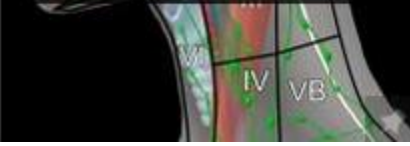
Spine

460 topics



Ultrasound

527 topics



Vasculature

60 topics



Search by keyword

STATdx COPD 1.下關鍵字 X

2.Filter 1

3.Filter 2

4.Bookmark list

5.其他參考資料超連結

Filter by Category: Cardiac, Brain, Breast, Chest, Gastrointestinal, Genitourinary, Gynecology, Head and Neck, Interventional Radiology, Musculoskeletal, Nuclear Medicine, Obstetrics, Pediatrics, Spine, Ultrasound, Vasculature, RADTools

Filter by Type: ALL, dx, ddx, 診斷, 鑑別, 解剖, 介入

Search for Image

Adenosis, Sclerosing Adenosis, Microglandular Adenosis, Air Bronchogram, Air Trapping, Breast Overview, Chiari 2, Coronary Artery Territories, Dural-based Mass, Solitary, Gastric Cancer/Gastrointestinal Stromal Tumor, Gastric Mass Lesions, Hip, Islet Cell Tumors, Microcephaly, Radial Head/Neck Fracture, Sacral Teratoma

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)

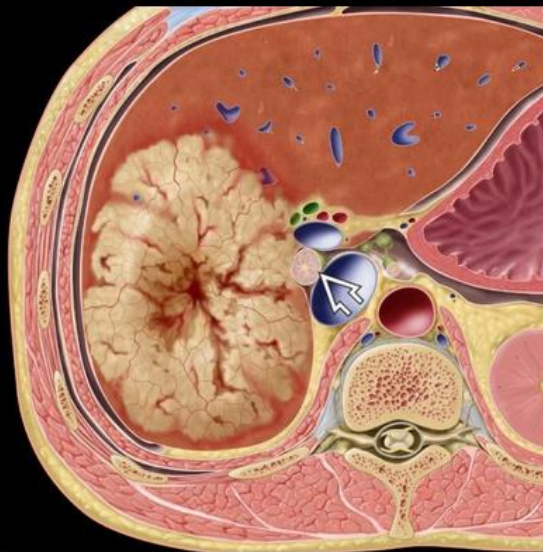
Exit Compare

Search for "liver scar"
Fibrolamellar HCC

DISMISS

IMAGES

TEXT



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

Search for "liver scar"
Focal Nodular Hyperplasia

DISMISS

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

DISMISS

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.

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





































STATdx Focal Nodular Hyperplasia

5 images : 4 references



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

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

ddx
T1 Hyperintense Basal Ganglia
Karen L. Salzman, MD
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COMMON

Physiologic Calcification, Brain

Neurofibromatosis Type 1

Hepatic Encephalopathy

Hyperalimentionation

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
- Hyperalimentionation**
 - 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

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KEY FACTS NEXT

Table of Contents

Case

Anatomy

DD


- Most are supratentorial
 - Point of origin can often not be determined
- Often massive, filling entire cranial vault
 - Gross distortion of cerebral architecture
- May extend through skull base into oral cavity
- 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



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 arise in the pineal region but grow as

Selected Images

**Brain Tumor in Child > 1 Year**
Brain | by Susan I. Blaser, MD, FRCPC
... with hemorrhage into tumor: Pineal Tumor: Heterogeneous Intracranial

- Color Doppler essential to look for flow

Top Differential Diagnoses

- Intracranial hemorrhage
 - No flow with Doppler

Images 1/6/08

Script

STATdR

Ophthalmology > Diagnosis > Brain > Tumors

Parenchymal Brain Tumors

Paula J. Woodward, MD

Selected Images

Hide Images



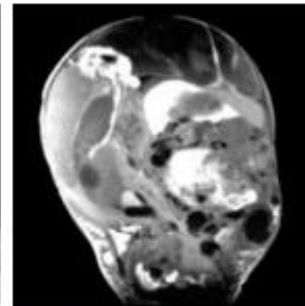
Sagittal graphic shows a heterogeneous pineal region teratoma. There are cystic and solid areas within the mass. Calcifications are the most specific sign of teratoma but are not always present. Most fetal brain tumors begin in the pineal region but grow so large that the point of origin is often not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



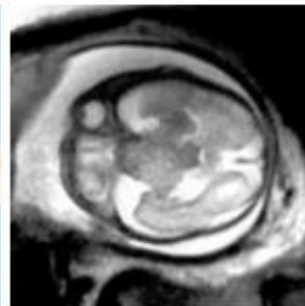
Postmortem coronal T1WI shows complete replacement of brain tissue by a complex mixed signal intensity mass. Immature teratoma with primitive neural ectodermal tissue, cartilage, bone, intestinal mucosa, smooth muscle, and hemorrhage was identified at autopsy.



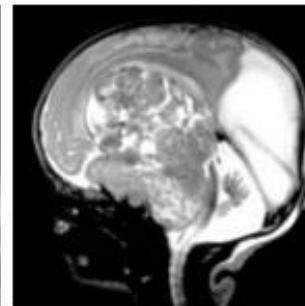
Transverse ultrasound of a fetal brain shows a mixed cystic and solid, echogenic midline mass which is causing obstruction.



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



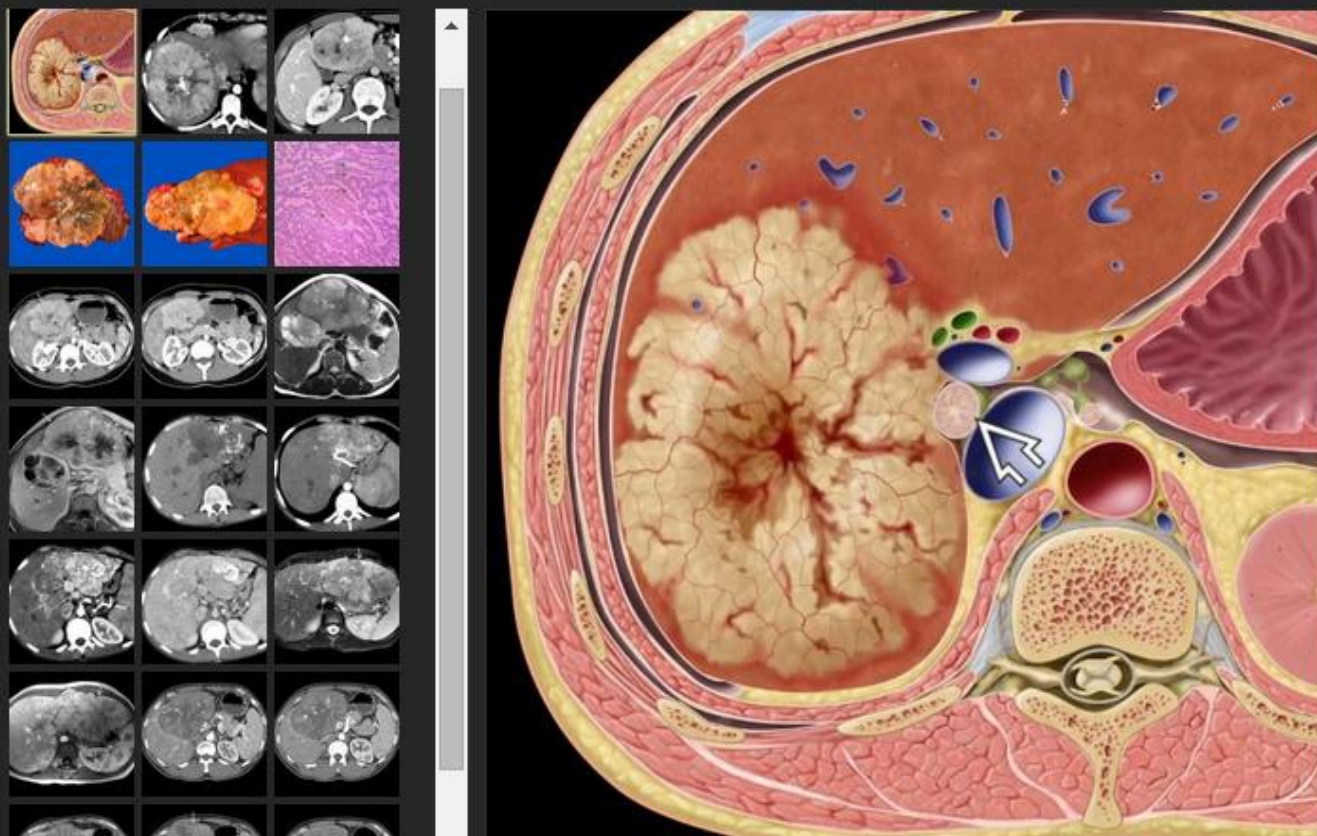
Axial T2WI MR of a 3rd trimester fetus shows a slightly hypointense, irregular, suprasellar mass.



Sagittal T2WI MR on day 1 of life shows a large heterogeneous mass with high signal cystic areas.

圖像自動轉存為PPT

Diagnosis ▾ Hepatobiliary and Pan... ▾ Liver ▾ Neoplasm, Malignant ▾ Fibrolamellar HCC ▾



Download to Presentation ← 點選print

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

n, nodal invasion, and lung metastases)
WI: Hypointense (FLC); hyperintense (FNH)

Bone Age Calculator

STATdx

What are you looking for?...



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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, carpals, 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)

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

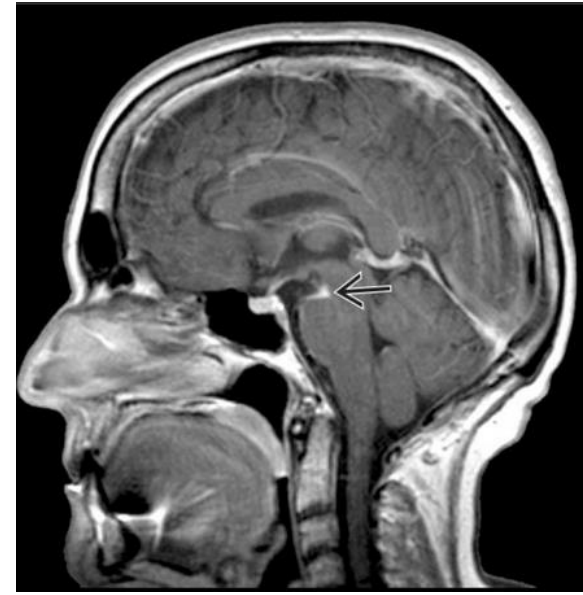
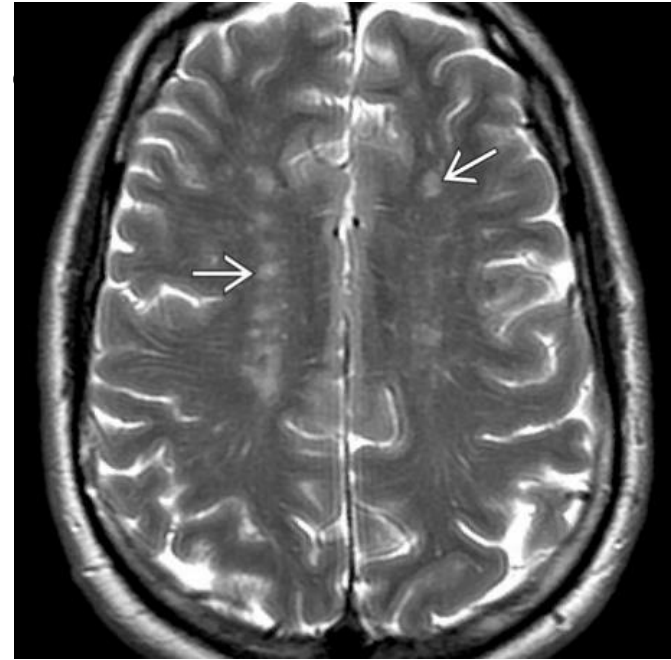
- 35-year-old woman complaints of weakness on one-side of the face after getting back from a camping trip
- Complaints also include severe headache, neck stiffness, fever, chills, muscle/joint pain and fatigue
- Patient presents with multiple erythema migrans (skin rashes), round, outwardly expanding 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..



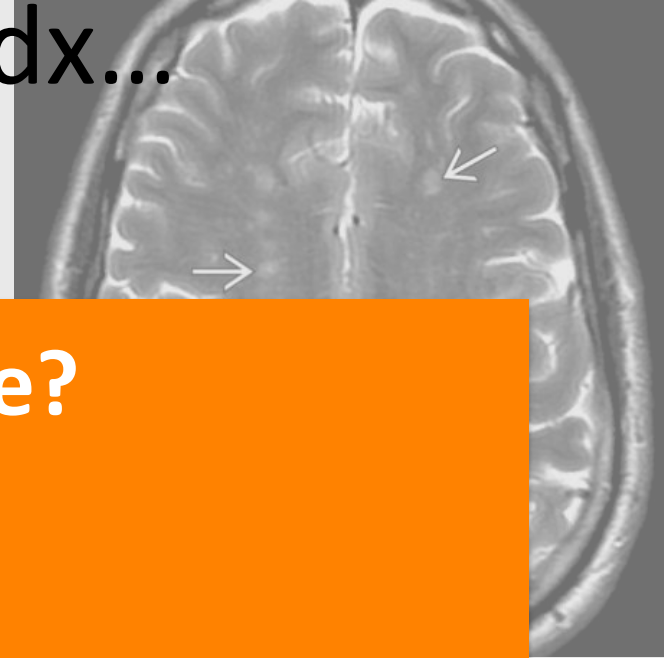
Navigating STATdx...

- Axial FLAIR image demonstrates multiple foci of signal abnormality involving the white matter.
- Consider differential diagnosis.
- Consider differential diagnosis including: axonal displacement in the posterior horn, tympanic membrane, nerve...

Lyme's disease?



Vasculitis?


Sarcoidosis?






















1 Search function helps user find relevant content

2 Users may search by documents or images

STATdx lyme's disease X  

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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 Angiitis; 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; Meningioangiomas; Neurocutaneous Melanosis. ... 20 images : 3 references Updated 10/27/08 
	ddx Enhancing Cranial Nerve(s) Brain by Anne G. Osborn, MD, FACR ... Less Common. Viral, Post-Viral Neuritis: Bell Palsy; Herpes Zoster; ADEM. Lyme Disease ; Lymphoma; Neurosarcoïd; 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

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Filter by Type

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Search for Images Instead



dx Lyme Disease

Brain | by Laurie A. Loevner, MD

... Lyme disease (LD), Lyme neuroborreliosis (LNB). Definitions: 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)

Brain | by Gary M. Nesbit, MD

... Granulomatous Angiitis; **Lyme Disease**

Updated



ddx Periventricular Enhancing Lesions

Brain | by Bronwyn E. Hamilton, MD

... **Lyme Disease**: Periventricular T2 hyperintensity. 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; Meningioangiomas; Neurocutaneous Melanosis. ...

20 images : 3 references

Updated 10/27/08



ddx Enhancing Cranial Nerve(s)

Brain | by Anne G. Osborn, MD, FACR

... Less Common. Viral, Post-Viral Neuritis: Bell Palsy; Herpes Zoster; ADEM. **Lyme Disease**: Lymphoma; Neurosarcoïd; 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

Information can also be filtered by diagnosis/differential diagnosis

3

More features like "compare" – to compare diagnosis

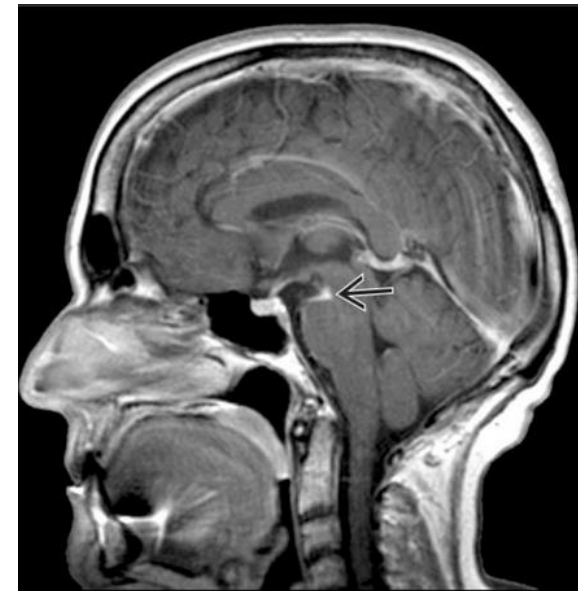
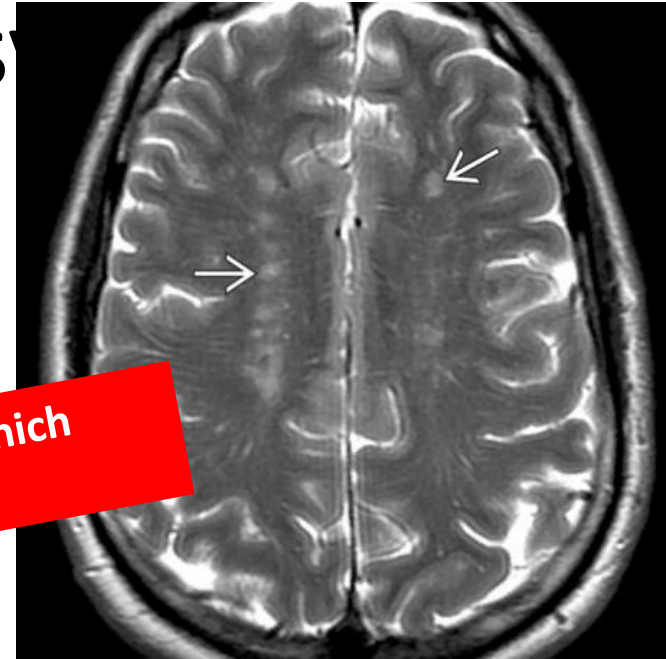
4

Decision support system

- Axial FLAIR image demonstrates multiple foci of signal abnormality involving the periventricular white matter bilaterally,.
- Contrast-enhanced axial T1W image demonstrates enhancement in the periventricular white matter bilaterally,.
- Coronal T2W image 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.

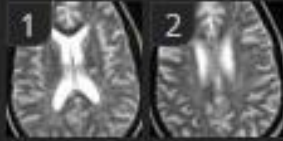
The Description includes the author notes and annotations for the case.

All cases include numerous labeled images.

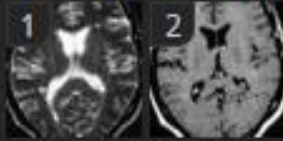
dx Lyme Disease
Laurie A. Loevner, MD

PATIENT CASES: TYPICAL

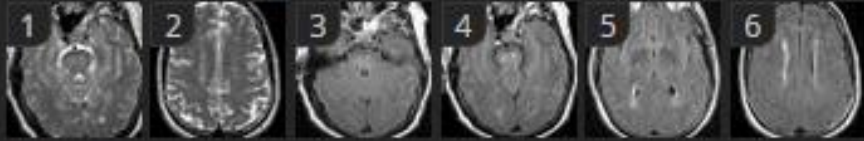
Multifocal white matter 2 images



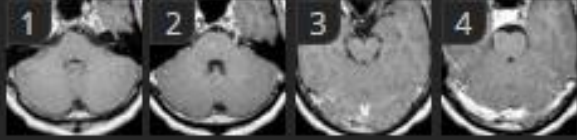
Enhancing parenchymal lesions 2 images




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

