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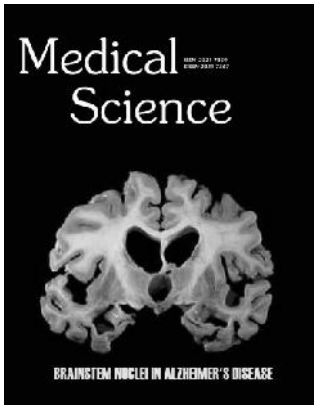
Medical Science

About the Cover



The pathological findings of brainstem nuclei in Alzheimer's disease are reported, however, the clinical manifestation based on these affected brainstem nuclei has been uncertain. We describe some clinical manifestation possibly associated with brainstem pathological changes in Alzheimer's disease. Most Parkinson's disease patients show decreased 123I-metaiodobenzylguanidine (MIBG) myocardial scintigraphy uptake. A decreased heart/mediastinum (H/M) ratio in MIBG scintigraphy has been attributed to Lewy body pathology in cardiac sympathetic nerves. Certain diseases such as Alzheimer's disease, the Lewy body variant of Alzheimer's disease, progressive supranuclear palsy (PSP), corticobasal degeneration, multiple system atrophy, and some cases of Parkinson's disease can present with MIBG normal Parkinsonism. We aimed to elucidate the clinical and radiological features of MIBG-normal Parkinsonism or its subgroup. Sixty-one patients with Parkinsonism underwent MIBG myocardial scintigraphy, of which 22 showed normal MIBG. Of these patients, 5 demonstrated both magnetic resonance imaging (MRI) and single photon emission computed tomography (SPECT) findings consistent with Alzheimer's disease. Here, we describe the clinical characteristics of these patients. Characteristics of these patients can be summarized as follows: >80 years of ages, predominantly male, and exhibiting Parkinsonism with rigidity and gait disturbance. Three patients exhibited tremor. Two patients demonstrated supranuclear ophthalmoparesis of vertical gaze. Two patients showed dementia. Neuropatholgical examination of an autopsied patient demonstrated pure Alzheimer's disease pathology without PSP pathology or Lewy body pathology. Alzheimer's disease can present initially and predominantly with Parkinsonism. Alzheimer's disease should be considered as a differential diagnosis of Parkinsonism (Ref: Naoki Kasahata, Fumihiko Tamamoto, Hiroyuki Kato. ^{123}I-metaiodobenzylguanidine myocardial scintigraphy-normal Parkinsonism with radiological features of Alzheimer's disease - Parkinsonism variant of Alzheimer's disease or Alzheimer's disease with brainstem involvement?-. *Medical Science*, 2016, 20(80), 132-141)

CASE REPORT

Role of MRI in diagnosis of an unusual case of celiac disease presenting as hepatomegaly

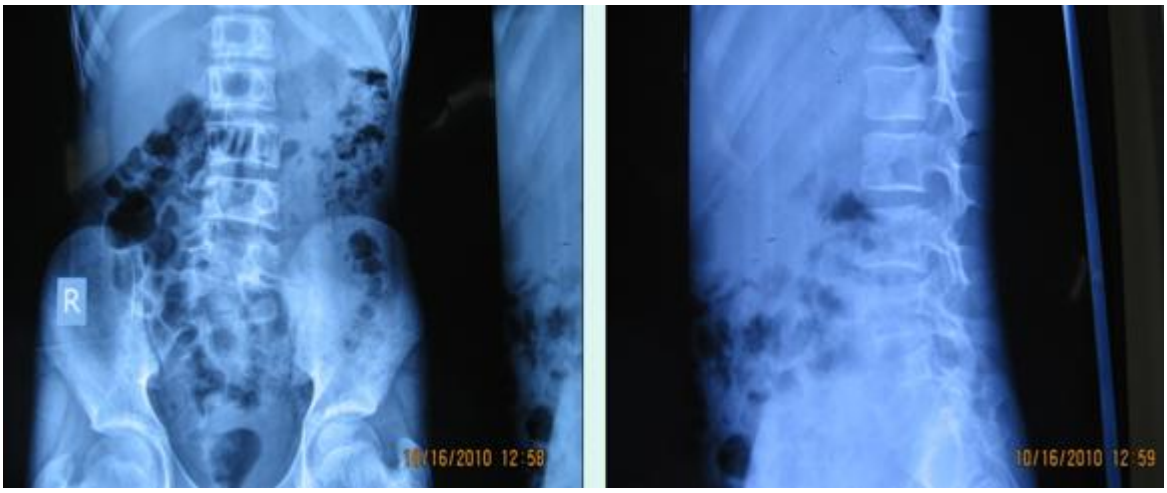
Rajeshwari K, Mohammed Fazil A, Sapna Singh, Neeta Khurana, Anuradha S

Celiac disease is a gluten sensitive enteropathy usually presenting with gastrointestinal symptoms, but unusual presentations make the diagnosis of this disease sometimes challenging. Nodular regenerative hyperplasia (NRH) is a rare condition associated with connective tissue disorders, autoimmune diseases, haematological malignancy, drugs and is a cause of non cirrhotic portal hypertension. It is characterized by multiple hepatic nodules in the absence of fibrosis. The association of celiac disease with nodular regenerative hyperplasia had been reported rarely in literature. We describe a case of 10 year old female child who presented as hepatomegaly with portal hypertension and was diagnosed as celiac disease with nodular regenerative hyperplasia with the help of magnetic resonance imaging (MRI) abdomen. The diagnosis was confirmed by celiac serology and duodenal biopsy. MRI abdomen has sensitivity and specificity of 70 to 80 % in detecting NRH. Increased ileal folds and reversed fold patterns are specific findings for celiac disease in MRI abdomen. We also reviewed the etiopathogenesis, clinical features and diagnosis of NRH and discuss the significance of abdominal imaging especially MRI in establishing the diagnosis of celiac disease.

Medical Science, 2016, 20(80), 117-122

One Stage Excision of Intraspinal Tumour with Immediate Reconstruction of Spine by Laminoplasty – A Case Report

Upadhyay PK, Pandey P, Bora S, Pandey S, Gupta U, Singh R

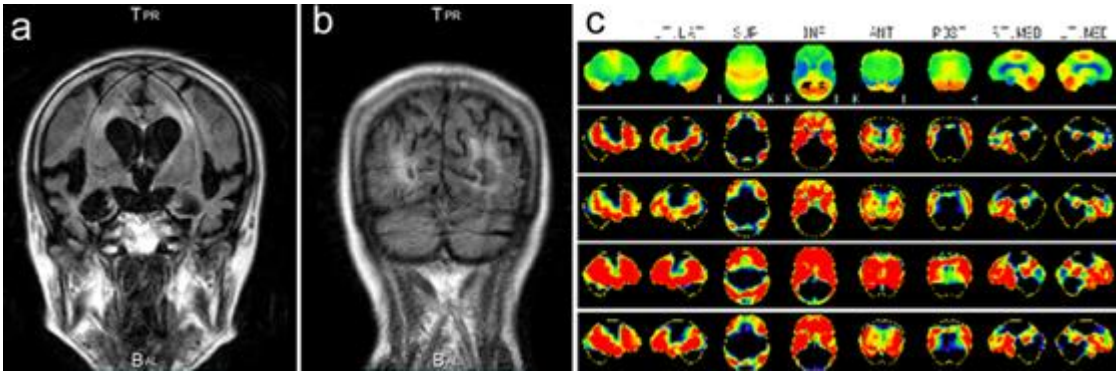


Laminoplasty is a technique that indirectly achieves decompression of spinal cord and avoids the complications of fusion (Oyama, 1973). It was initially proposed by the Japanese as a treatment of ossified posterior longitudinal ligament in the cervical region. Its use has been expanded since then and is widely used in the thoracic and lumbar region (Lonstein, 1976). We present a case report of a 20 year male patient with intramedullary tumour at L2L3 level, who underwent excision and laminoplasty and discuss the surgical procedure, its merits of the procedure.

ANALYSIS

^{123}I-metaiodobenzylguanidine myocardial scintigraphy-normal Parkinsonism with radiological features of Alzheimer's disease - Parkinsonism variant of Alzheimer's disease or Alzheimer's disease with brainstem involvement?-

Naoki Kasahata, Fumihiko Tamamoto, Hiroyuki Kato



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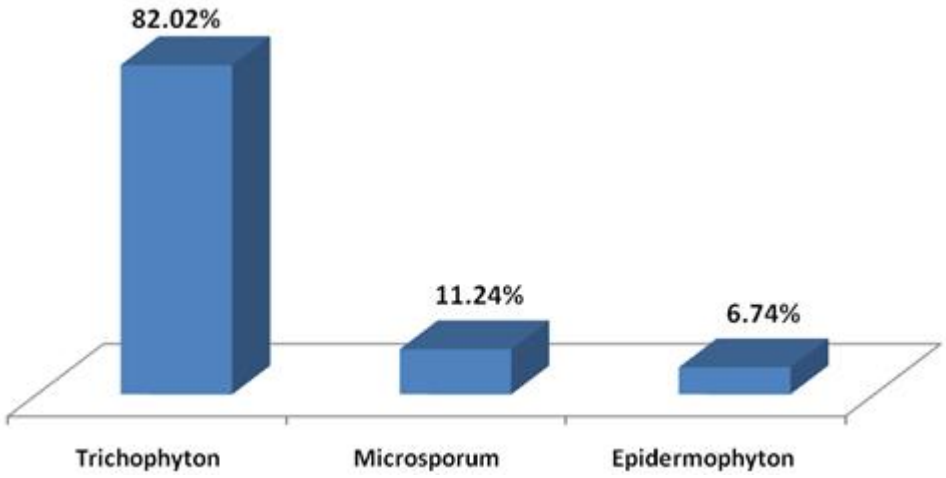
Rate of tinea pedis infection in a population of patients with diabetes mellitus

Ezejiofor OI, Ogualili PN, Nwaneli CU, Oguejiofor OC, Egwuatu CC, Anyabolu AE



Tinea pedis is a common superficial fungal infection caused by dermatophytes. It has a prevalence of about 10% in the general population. The species of dermatophyte implicated include Trichophyton, Microsporun and Epidermophyton with Trichophyton rubrum being responsible for most infections. To determine the prevalence of Tinea pedis and dermatophyte species implicated in a population of diabetic patients attending an outpatient clinic. Six hundred and ninety five diabetic patients attending the outpatient clinic of Obafemi Awolowo University Teaching Hospital Complex were examined for evidence of fungal infection of the feet. Skin scrappings were collected from those with clinical fungal infection and immediately sent to the laboratory for fungal studies. Microscopy and culture was done for confirmation of diagnosis and speciation. One hundred (14.4%) of the participants had clinical Tinea pedis. Eleven (11%) of the specimens collected showed no fungal growth after four weeks inoculation to Sabouraud's Dextrose Agar (SDA). Trichophyton species were present in Seventy three (82.02%) of the growths/isolates while ten (11.24%) had Microsporum and six (6.74%) Epidermophyton species. Since sizeable population of diabetics do have Tinea pedis infection, Physicians caring for them, should remember that it may result in complications like the formation of foot ulcers through the development of fissures in the plantar and/or interdigital skin.

Medical Science, 2016, 20(80), 142-147

CASE STUDY

Food Dependent Exercise Induced Anaphylaxis: A Case Report from Saudi Arabia

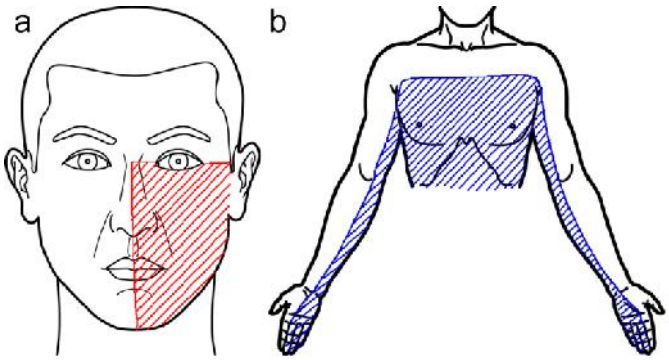
Malibary H

Food dependent exercise induced anaphylaxis is a rare, potentially fatal yet under-recognized condition in which patients develop anaphylaxis only if they exercise within a few hours of food ingestion. We present a case of food dependent exercise induced anaphylaxis in a 23 years old Saudi girl. She had three episodes of anaphylaxis, all happened during exercise that was preceded by food ingestion. Skin prick test confirmed wheat to be the causative allergen. Avoidance of this food before exercise resulted in absence of further reactions. Food dependent exercise induced anaphylaxis should be considered in otherwise unexplained anaphylactic reactions. Accurate diagnosis and identification of the causative food allergens will lead to life-saving preventative strategies.

Medical Science, 2016, 20(80), 148-151

Facial sensory disturbance associated with cervical compressive myelopathy

Naoki Kasahata



Cervical myelopathies do not usually cause facial sensory disturbance. We encountered, however, 2 patients developed facial sensory disturbance associated with cervical compressive myelopathy. We compared neurological findings and MRI findings of these patients. Patient 1 gradually developed tingling sensations of his left hand, difficulty in walking, urinary frequency, urinary incontinence, difficulty in urination, sensory disturbance of the left hand, and sweating abnormality. Patient 1 exhibited hyperalgesia of his left face, weakness of the left intrinsic hand muscle, clumsiness of the bilateral hands, hyporeflexia of the bilateral upper extremities, hyperreflexia of the left lower extremity, sensory level at C7, and autonomic disturbance. MRI revealed C5-6 intervertebral level myelopathy. Patient 2 gradually developed tingling sensations of her left occipital region, left hand, left sole of foot, and left side of the mouth. Patient 2 exhibited lively deep tendon reflexes, and slightly decreased vibration senses. MRI revealed C6-7 intervertebral level myelopathy. The facial sensory disturbance of these patients seems to be associated with cervical compressive myelopathy. The spinal trigeminal nucleus projects to C5-C8 levels in the rat. Furthermore, cervical spinal cord projects to the spinal trigeminal nucleus even from C7 to T1 in the rat. The facial sensory disturbance of these patients may be associated with stimulative lesions of projections from the spinal trigeminal nuclei to the cervical spinal cords or projections from the cervical spinal cords to the spinal trigeminal nuclei.

Medical Science, 2016, 20(80), 152-157

Solitary Metachronus Contralateral Adrenal Metastasis from Renal Cell Carcinoma

Suraci A, Suraci N

We present a case of solitary contralateralmetachronus adrenal metasisis five years after radical nephrectomy. The patient underwent laparoscopicadrenalectomy for primary renal cell carcinoma of the kidney for renal cell carcinoma. The patient was then treated with steroid replacement. The patient was in remission for six years until death from unrelated cardiovascular collapse. Subsequently, the patient was found to have metachronous contralateral adrenal metastasis from the initial renal cell carcinoma. Metachronus renal cell carcinomas are rare, but can be treated and cured aggressively with surgery when detected early on in its progression. Our aim is to raise awareness of this occurrence and further support literature of this condition.

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