



Jai Sri Gurudev ||

Sri Adichunchanagiri Shikshana Trust(R)
Adichunchanagiri Institute of Medical Sciences
Sri Adichunchanagiri Hospital & Research Center
B G Nagara – 571448



Department of Medicine



AIMS – MED PULSE



Chief Patrons

Sri SriSriNirmalanandanatha

Mahaswamiji

Chief Advisor

Dr. M.G. Shivaramu, Principal

Chief Editor

Dr. H. Vasudeva Naik,

Professor & HOD

Editorial Board

Dr. Shetty Shivakumar M

Dr. Varun

Dr. Meghana

Professors

Dr. Jagannatha K

Dr. Shetty Shivakumar M

Dr. Shashikantha

Dr. Madhura T L

Asso. Professors

Dr. Vimala S Iyengar

Dr. Ravi. B. N.

Dr. Shruthi B

Asst. Professors

Dr. Ramegowda R.B.

Dr. Ramanatha Shenoy

Dr. Pavan M

Dr .Sumanth B.V.

Dr .Mahantesh.G.

Dr. Aashith.S.

Dr. Dhananjaya.M.S.

Dr.Shivashankar Swamy.M.S.

Editorial

Dear friends,

The department of General Medicine has been striving for excellence in patient care, teaching program in the department, research work or publications.

The Department has been working on various ongoing research projects. Several rare cases are being studied, documented and sent for research publication. The department had guest lecture on the recent advances in cardiology by the International faculty and also in gastroenterology on Hepatitis and Liver transplantation. Poster presentations were done by post graduates at APICON.

The postgraduate students are being taught clinical skills and applied theory on a regular basis. We acknowledge the constant support, guidance and encouragement from our beloved and dynamic Principal DR. M.G.Shivaramu in all our departmental activities.

Dr. H. Vasudeva Naik (Professor & H.O.D)

“MEDICINE IS A SCIENCE OF UNCERTAINTY AND AN ART OF PROBABILITY” – SIR WILLIAM OSLER

ACTIVITIES OF DEPARTMENT OF MEDICINE

GUEST LECTURE BY INTERNATIONAL FACULTY FROM USA ON CURRENT ROLE OF CARDIOVASCULAR IMAGING AND RECENT ADVANCES IN CARDIOLOGY.

GUEST SPEAKERS: Dr.RAMESH GOWDA, INTERVENTIONAL CARDIOLOGIST, MOUNT SINAI BETH ISAREL MEDICAL CENTRE, NEWYORK.

DR.HAROLD IRA LITT ,CONSULTANT RADIOLOGIST AND CARDIAC IMAGING SPECIALIST, UNIVERSITY OF PENNSYLVANIA MEDICAL CENTRE.

DR.MAMATHA R GOWDA, CONSULTANT RADIOLOGIST AND CARDIAC IMAGING SPECIALIST STATEN ISLAND UNIVERSITY HOSPITAL, NEWYORK .



GUEST LECTURE IN GASTROENTEROLOGY

GUEST LECTURE BY: DR. SURESH RAGHAVIAH consultant HPB and multiorgan transplant surgeon; BGS GLOBAL HOSPITAL on INDICATIONS AND TECHNIQUES OF LIVER TRANSPLANTATION,HEPATOCELLULAR CARCINOMA.

DR.ADARSH.C.K. consultant Gastroenterologist, Hepatologist and Advanced Endoscopist; BGS GLOBAL HOSPITAL on MANAGEMENT OF HEPATITIS B AND C

CASE REPORT

- 35 year old male alcoholic presented with 5 episodes of GTCS followed by altered sensorium, not responding to pain since then. No history of fever, vomiting
- His last binge drinking was 48 hours prior to admission and withdrawal seizure was in the differential.
- Patient's sensorium didn't improve even after 72 hours with appropriate treatment.
- Electroencephalogram showed diffuse slow waves of 5-8 Hz without epileptiform discharge. CSF study done to rule out infection was normal
- CT brain was done as an initial imaging study revealed hypoattenuating lesions in the corpus callosum
- Subsequent MRI brain revealed hypo intense corpus callosum and periventricular white matter in T1 weighed images with corresponding T2 images showed hyper intensities with true restricted diffusion in DWI image
- He was treated with IV thiamine, VITAMIN B 12.
- His GCS improved for first 2 days and was the same from then.



CT coronal section showing hypdensities in the corpus callosum

- Marchiafava-Bignami disease (MBD) is a rare, alcohol-associated disorder characterized by demyelination and necrosis of the corpus callosum
- Mostly seen in male alcoholics
- Caused by the combination of alcohol abuse and malnutrition, leading to metabolic, toxic, and vascular disturbances
- MBD carries poor prognosis, TYPE A where patient mainly presents with coma and stupor has a mortality of 90%
- Clinical symptoms include reduced consciousness, psychotic and emotional symptoms, depression and apathy, aggression.
- Treatment options tried include thiamine, folate and VITAMIN B 12
- amantadine and high dose corticosteroids have been tried with limited success

- Marchiafava-Bignami disease though rare should be considered as a possible differential in alcoholics who otherwise present with an unexplained altered sensorium, aggressive behavior.
- CT can be used as an initial screening tool, MRI is found to be more sensitive in the diagnosis.
- Early recognition and treatment of this syndrome is essential for a favorable clinical outcome

ARTICLES

Gluten-free diet increases beta-cell volume and improves glucose tolerance in an animal model of type 2 diabetes.

BACKGROUND:

Gluten-free (GF) diet alleviates type 1 diabetes in animal models and possibly in humans. We recently showed that fatty acid-induced insulin secretion is enhanced by enzymatically digested gluten (gliadin) stimulation in INS-1E insulinoma cells. We therefore hypothesized that GF diet would induce beta-cell rest and ameliorate type 2 diabetes.

METHODS:

C57BL/6JBomTac (B6) mice were fed a high-fat (HF), gluten-free high-fat (GF-HF), standard (STD) or gluten-free (GF) diet for 42 weeks.

RESULTS:

Short-term (6-24 weeks) GF-HF versus HF feeding impaired glucose tolerance and increased fasting glucose. Long-term (36-42 weeks) GF-HF versus HF feeding improved glucose tolerance and decreased fasting leptin. Mice fed a GF-HF versus HF diet for 42 weeks showed higher volumes of beta cells, islets and pancreas. The beta-cell volume correlated with the islet- and pancreas volume as well as body weight. GF-HF versus HF diet did not influence toll-like receptor 4 (TLR4), interleukin 1 (IL-1), interleukin 6 (IL-6) or tumour necrosis factor-alpha (TNF-alpha) mRNA expression in intestine. STD versus GF feeding did not affect any parameter studied.

CONCLUSIONS:

Long-term feeding with GF-HF versus HF increases beta-cell volume and improves glucose tolerance in B6 mice. The mechanism may include beta-cell rest, but is unlikely to include TLR4 and proinflammatory cytokines in the intestine. Beta-cell volume correlates with pancreas volume and body weight, indicating that insulin secretion capacity controls pancreas volume. Thus, long-term GF diets may be beneficial for obese type 2 diabetes patients and trials should be performed.

[Haupt-Jorgensen M](#)¹, [Buschard K](#)², [Hansen AK](#)³, [Josefsen K](#)², [Antvorskov JC](#)².

[Diabetes Metab Res Rev.](#) 2016 Oct;32(7):675-684. doi: 10.1002/dmrr.2802. Epub 2016 Apr 21.

Dietary gluten and the development of type 1 diabetes

Gluten proteins differ from other cereal proteins as they are partly resistant to enzymatic processing in the intestine, resulting in a continuous exposure of the proteins to the intestinal immune system. In addition to being a disease-initiating factor in coeliac disease (CD), gluten intake might affect type 1 diabetes development. Studies in animal models of type 1 diabetes have documented that the pathogenesis is influenced by diet. Thus, a gluten-free diet largely prevents diabetes in NOD mice while a cereal-based diet promotes diabetes development. In infants, amount, timing and mode of introduction have been shown to affect the diabetogenic potential of gluten, and some studies now suggest that a gluten-free diet may preserve beta cell function. Other studies have not found this effect. There is evidence that the intestinal immune system plays a primary role in the pathogenesis of type 1 diabetes, as diabetogenic T cells are initially primed in the gut, islet-infiltrating T cells express gut-associated homing receptors, and mesenteric lymphocytes transfer diabetes from NOD mice to NOD/severe combined immunodeficiency (SCID) mice. Thus, gluten may affect diabetes development by influencing proportional changes in immune cell populations or by modifying the cytokine/chemokine pattern towards an inflammatory profile. This supports an important role for gluten intake in the pathogenesis of type 1 diabetes and further studies should be initiated to clarify whether a gluten-free diet could prevent disease in susceptible individuals or be used with newly diagnosed patients to stop disease progression.

[Julie C. Antvorskov](#), [Knud Josefsen](#) et al,

[Diabetologia](#). 2014; 57(9): 1770–1780.

Collected by : Dr. Shetty Shivakumar M, Professor of Medicine.A.I.M.S. B.G.Nagara.

MEDICAL QUIZ

A 23-year-old woman presented with a 1-month history of headache, vomiting, recurrent episodes of syncope, weight gain, and leg pain.

A physical examination revealed several subcutaneous nodules on the patient's face and trunk. Exophthalmos, fundal hemorrhage, neck rigidity, and a hypertrophic appearance of the thigh and calf muscles were also noted. Magnetic resonance imaging (MRI) of the head revealed diffuse hyperintense septated cystic lesions in the parenchymal, intraventricular, and retroocular regions .



These lesions had a “cyst with dot sign” appearance, or eccentric scolices.

Answer: **DISSEMINATED CYSTICERCOSIS**

Coronal MRI of the thighs also revealed numerous hyperintense lesions (Panel B). Antibodies to cysticerci were detected in the serum and cerebrospinal fluid by means of an enzyme-linked immunosorbent assay. An oval translucent cyst was resected from the gastrocnemius muscle, and histopathological examination of the cyst (Panel C) confirmed the diagnosis of cysticercosis.

Cysticercosis is caused by the larvae of the parasite *Taenia solium* and can be acquired by consuming foods contaminated with feces that contain taenia eggs shed from a human carrier of the tapeworm.

This patient was treated with mannitol and glucocorticoids to decrease edema and inflammation. Praziquantel and albendazole were used to treat the parasitic infection. Repeat imaging showed improvement, and the patient was asymptomatic 2 months after treatment.

H1N1

H1N1 - Swine Flu Safety Guidance

SAFETY MED A



Avoid close contact.
Avoid close contact with people who are sick. When you are sick, keep your distance from others to help prevent the spread of the disease.

Stay home when you are sick.
If possible, stay home from work, school, and errands when you are sick. You will help prevent others from catching your illness.

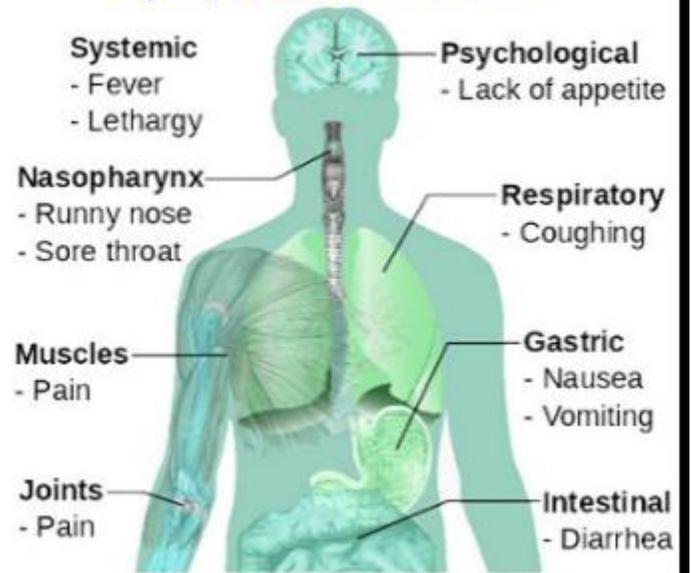
Cover your mouth and nose.
Cover your mouth and nose with a tissue when coughing or sneezing. It may help prevent the spread of the disease.

Clean your hands.
Washing your hands often will help protect you from germs and stop the spread of germs. Preferably use anti bacterial soap.

Avoid touching your eyes, nose or mouth.
Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.

Practice other good health habits.
Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

Symptoms of swine flu



Antiviral Treatment for H1N1 Influenza A (Swine Flu) Infections in Humans

- Antivirals may be used as either a treatment to a confirmed or suspected case of H1N1 Influenza A (swine flu) or as prophylactic treatment to exposed individuals under specified conditions
- At this time, prehospital treatment of patients with antiviral agents is not being utilized
- CDC recommends the use of Tamiflu (*oseltamivir* phosphate) or Relenza (*zanamivir*) as part of the treatment and/or reduction of severity of infection with swine influenza viruses.

