



# CLINICAL INFECTIOUS DISEASES SOCIETY

**Editor:**

Dr Ram Gopalakrishnan

**Associate Editor:**Dr Neha Gupta, Dr Ashwini  
Tayade, Dr Surabhi Madan**Design & format:**

Dr Laxman G. Jessani

**Editor's note**

Dear CIDS members

As in previous years, CIDSCON has stimulated an increase in our society membership. We welcome new members and also encourage members to hold ID CMEs in their areas, for which CIDS endorsement can be obtained: this will be beneficial to both members and our society.

Sincerely

Ram Gopalakrishnan

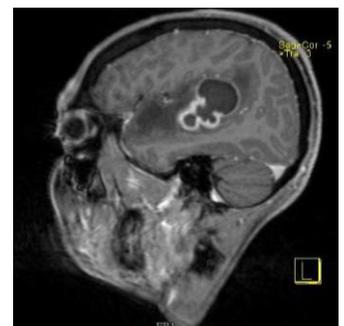
**Photo quiz**

A 51/M presented with low grade fever associated with weight loss and poor appetite last one month. Systemic examination was normal. He had no skin abscesses or nodules.

Past medical history was notable for haemochromatosis, thyrotoxicosis (post radioiodine ablation), non specific colitis and a diagnosis of large fiber peripheral neuropathy (acute on chronic demyelinating neuropathy) two months ago. He had received methylprednisolone pulse therapy of five days and was on maintenance therapy of oral prednisolone (50 mg) and oral azathioprine (50 mg) per day for the last one and half month.

His investigations revealed a WBC count of 1,280 cells/ mm<sup>3</sup>, platelets- 80,000/ mm<sup>3</sup>. Liver function tests were normal. After admission over the next 5 days, WBC count declined to 620/mm<sup>3</sup>, platelets - 60,000/mm<sup>3</sup> and RBC - 3,100,000/mm<sup>3</sup>. He was started on Inj. G-CSF once in daily doses subcutaneously. Oral prednisolone was continued.

CT paranasal sinuses were normal. His CT chest (see photo) showed bilateral lung nodular lesions with cavitation. A CT guided biopsy was deferred by the radiologists. He was started on empirical anti-tubercular Drugs. 20 days later, he was re-admitted with fever and generalized seizure. MRI Brain is shown below. What is your diagnosis?



## News from the ID world

### **WHO congratulate India on Maternal and Neonatal Tetanus Elimination**

(provided by Dr Ashwini Tayade)

India has achieved a momentous public health feat – the elimination of maternal and neonatal tetanus. Maternal and neonatal tetanus is reduced to less than one case per 1 000 live births in all 675 districts of the country. WHO has validated this achievement adding India to the list of countries that have successfully battled this killer disease. This is a huge achievement for India which until a few decades ago reported 150 000 to 200 000 neonatal tetanus cases annually.

The Government of India's innovative approach of utilizing elements of existing and new programs provided the synergistic lift off to make MNTE a reality. India's re-energized national immunization programme and the special immunization weeks and the most recent 'Mission Indradhanush', helped ensure that children and pregnant women are reached with vaccines. The 'National Rural Health Mission' promoted institutional deliveries with a focus on the poor. The 'Janani Suraksha Yojana' encouraged women to give birth in a health facility.

With India's achievement, almost the entire WHO South-East Asia Region, barring a few districts in Indonesia, has now eliminated maternal and neonatal tetanus.

### **Immunization news: US recommendations on influenza vaccine for 2015-2016 influenza season (August 2015)**

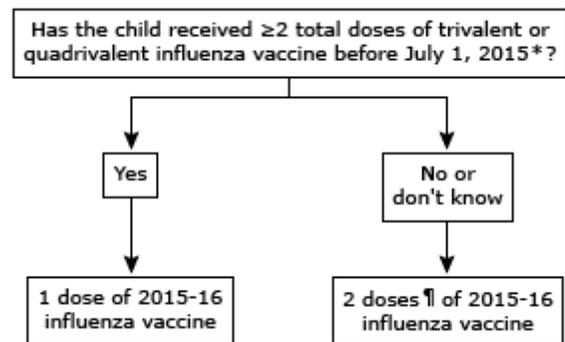
(provided by Dr Surabhi Madan)

In August 2015, the Advisory Committee on Immunization Practices released recommendations for the prevention and control of influenza during the 2015-2016 influenza season in the United States. As in previous seasons, seasonal influenza vacci-

-nation is recommended for everyone  $\geq 6$  months of age. Changes for the 2015-2016 season include:

- Different influenza A H3N2 and influenza B (Yamagata lineage) antigens than were in the 2014-2015 vaccines. The A/California/7/2009 (H1N1)pdm09-like virus continues to be included.
- A simplified dosing algorithm for children six months through eight years (shown below)
- Availability of a quadrivalent intradermal vaccine for adults 18 through 64 years of age

Influenza vaccine dosing algorithm for children aged 6 months through 8 years



\* The two doses need not have been received during the same season or consecutive seasons.  
¶ Doses should be administered at least four weeks apart.

It is expected that the same vaccine will be available to Indian clinicians, though the quadrivalent vaccine is unlikely to be marketed here. Last year the H3N2 strain matched poorly with the circulating one, hopefully this will be corrected in this year's composition.

## Snippets from the literature

### **Rifampicin exposure is lower in HIV-infected TB patients receiving intermittent than daily anti-tuberculosis treatment**

International Journal of Tuberculosis and Lung Disease, Volume 19, Number 7, 1 July 2015, pp. 805-807

This paper compared the pharmacokinetics of rifampicin (RMP) during daily and intermittent (thrice weekly) anti-tuberculosis treatment in HIV infected tuberculosis patients. Patients treated with a thrice-weekly regimen had significantly lower plasma peak concentration, area under the time concentration curve from 0 to 24 h and higher oral clearance of RMP than those treated with the daily regimen. The median values were respectively 3.7 and 6.4 µg/ml ( $P < 0.001$ ), 20.7 and 29.4 µg/ml.h ( $P = 0.03$ ) and 21.7 and 15.3 ml/min ( $P = 0.03$ ).

This paper supports WHO recommendations to routinely give daily rifampicin to HIV infected patients with TB, and will hopefully stimulate RNTCP to give up alternate day rifampicin.

### **Intravenous Colistin Use as a Surveillance Tool for Gram-Negative Bacillary Antimicrobial Resistance?**

Clin Infect Dis 2015 Jan 1; 60:79

In the era of NDM-1, tracking MDR GNB is essential but surveillance is often poor in India in hospital settings. This multi center study from the USA describes tracking use of colistin as a surrogate marker for MDR GNB, as pharmacy records may offer superior data compared to microbiologic culture results.

A 7-year observational study found that colistin use increased by 179% between 2006 and 2012 at 40 academic medical centers, but colistin-use tracking missed 47% of possible cases of extensively drug-resistant gram-negative bloodstream infections.

### **Effects of a Carbapenem De-escalation Antibiotic Stewardship Program**

J Antimicrob Chemother 2014 Dec 3

In this study conducted in Singapore, where ESBLs are endemic as in India, researchers reviewed the records of 300 patients hospitalized between September 2011 and December 2012 for whom the hospital's antimicrobial stewardship committee had recommended de-escalating an initial empirical imipenem or meropenem regimen. In 62% of these 300 patients, a narrower-spectrum antibiotic was recommended (including a switch from imipenem or meropenem to ertapenem in 15%), whereas in 38%, discontinuation of antibiotics was suggested. The recommendations were followed for 68% of the patients.

Rates of clinical success, 30-day mortality, and 30-day readmission, as well as durations of antibiotic treatment and hospitalization, were similar between the de-escalated and non-de-escalated patients. However, the de-escalated group had a significantly shorter duration of carbapenem use (median, 6 vs. 8 days) and significantly lower rates of adverse drug reactions (5% vs. 13%), antibiotic-associated diarrhea (4% vs. 13%), and infection or colonization with carbapenem-resistant *Acinetobacter baumannii* (2% vs. 7%).

These encouraging results should promote the establishment of similar stewardship programs at all Indian hospitals.

### **Steroids for CAP?**

JAMA 2015 Feb 17; 313:673

Lancet 2015 Jan 18

Two studies published earlier this year suggest that steroids may be beneficial for CAP.

The first administered prednisone 50 mg daily for 7 days or placebo. Median time to clinical stability was shorter in the prednisone group (3.0 days) than in the placebo group (4.4 days).

The second study randomized adults with severe CAP and a high inflammatory response (C-reactive protein level >150 mg/L) to receive intravenous methylprednisolone 0.5 mg/kg or placebo every 12 hours for 5 days. Steroid-group patients were significantly less likely than placebo-group patients to experience treatment failure (13% vs. 31%) or to show radiographic progression (2% vs. 15%). In-hospital mortality (10% and 15%) and causes of death were similar between groups.

### **Linezolid inferior to daptomycin for VRE**

*Clin Infect Dis.* (2015)doi: 10.1093/cid/civ444First

published online: June 10, 2015

This was a national retrospective cohort study comparing linezolid and daptomycin (6mg/kg) for the treatment of VRE-BSI. Linezolid was associated with a significantly higher risk of treatment failure compared with daptomycin (risk ratio [RR], 1.37; 95% confidence interval [CI], 1.13–1.67;  $P = .001$ ). Linezolid was also associated with higher 30-day mortality (42.9% vs 33.5%; RR, 1.17; 95% CI, 1.04–1.32;  $P = .014$ ) and microbiologic failure rates (RR, 1.10; 95% CI, 1.02–1.18;  $P = .011$ ).

It appears high dose daptomycin is the drug of choice for VRE bacteremia.

### **Guideline watch**

(provided by Dr Surabhi Madan)

### **2015 Infectious Diseases Society of America (IDSA) Clinical Practice Guidelines for the Diagnosis and Treatment of Native Vertebral Osteomyelitis in Adults**

*Clin Infect Dis.* (2015) 61 (6): e26-e46 doi:10.1093/cid/civ482

### **New Members**

We welcome the following new members to CIDS:

Dr. Satyapriya Mishra	Odisha	Dr. Jaya Chakravarty	Varanasi
Dr. Samir Kumar Rama	West Bengal	Dr.Naga Jawahar Rajesh .T	Telegana
Dr. Kamal Kishore	Haryana	Dr. Prasad Rao Pantulu Voleti	Uttar Pradesh
Dr. Subhasish Kamal Guha	West Bengal	Dr. Ketoki Kapila	Uttar Pradesh
Dr. Ajit Kumar Thakur	Faridabad, Haryana	Dr. Ansuman Dal behera	New Delhi
Dr. Krishnendu Dev	West Bengal	Dr. George M Abraham	Punjab
Dr. Ravi Kant Porwal	Jaipur	Dr. Mary John	Punjab

Dr. Pallab Ray	Chandigarh	Dr. Meghana Nathani Kabra	Haryana
Dr. Anirban Bhaduri	West Bengal	Dr. Arun Dewan	New Delhi
Dr. Indira Ramaiah	Bangalore	Dr. Reena Raveendran	New Delhi
Dr. Veerottam Tomer	Uttar Pradesh	Dr. Lalitha Sekhar	New Delhi
Dr. CS. Sharma	Pune	Dr. Rahul R. Tambe	Mumbai
Dr. Jaydip Bagchi	West Bengal	Dr. Tanu Singhal	Mumbai
Dr. Vikram Balwani	Madhya Pradesh	Dr. Deepak R Madi	Karnataka
Dr. Ishwar Chandra Behera	Odisha		

### **Upcoming conferences and meetings**

**2<sup>nd</sup> Indian Transplant Infectious Diseases Conference**

**October 2-3, Chennai**

**<http://www.cmch-vellore.edu/pdf/events/tid.PDF>**

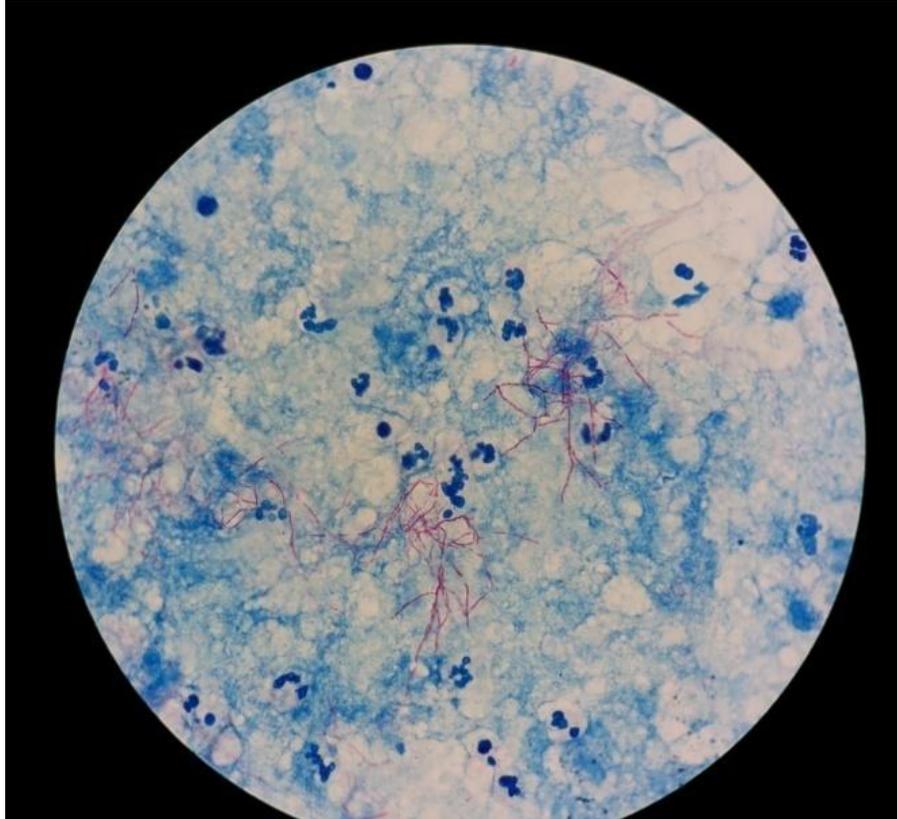
**8<sup>th</sup> Annual Conference of AIDS Society of India**

**October 30-Nov 1, Mumbai**

**<http://www.asi-asicon.com/>**

## Answer to photo quiz

An urgent placement of drainage tube in right parietal abscess was done by neurosurgery team. Thick pus was obtained which revealed gram-positive beaded branching filaments suggestive of Nocardia. AFB stain and culture, fungal stain and culture were negative in the pus sample obtained.



A thick-walled cavity in non-apical region of lung with multiloculated supratentorial brain abscesses is suggestive of nocardiosis.

Dexamethasone and anti-tubercular treatment was stopped. The patient has been doing well on treatment.

**Diagnosis:** Nocardia cavitory pneumonia with brain abscess.  
(case provided by Dr Neha Gupta)