

What I learned in 2012 from TB meetings

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TB Consultants Meeting

- November 7-8, 2012 Newark, NJ
- TB Consultants for RTMCC region
- 15 states
- Guest speaker from Montreal: Dick Menzies

Dr. Menzies

- New Tools for TB
- Improvements in past decade used “old” tools such as PPD, routine cultures, standard 4 drug therapy.
- Quantiferon or T-Spot (IGRA)

Quantiferon or T-Spot

- How good at predicting progression to active TB?
- If positive IGRA, what is incidence of developing active TB?
- High burden countries risk 6-21 cases/1000 person years.
- Slightly better than PPD, more so if BCG given.
- But rates of active TB still low (1-2%)

Reproducibility of QFT

- How “stable” are QFT results
- Same specimen repeated in same/different lab
- Varying time from blood draw to incubation
- Repeating assays on different days
- 7-11% discrepancy or discordant
- Most were close to cut-off point (0.25IU)

Menzies: Weekly INH-Rifapentine

Original NEJM study 2011

	9 INH	3 INH+RIFAPENTINE (HP)
RANDOMIZED	3649	3895
COMPLETED	2536 (69%)	3190 (82%)
TB DISEASE ALL	12 (0.4%)	7 (0.2%)
TB DISEASE COMPLETED	5 (0.2%)	4 (0.1%)

Sterling et al, NEJM 2011; 365:2155-66

2011 NEJM Study

Adverse Events

	9 INH	3 INH+RIFAPENTINE
RANDOMIZED	3649	3895
TOTAL GRADE 3-4 EVENT	7.4%	6.0%
DRUGS STOPPED	3.6%	5.0%
HEPATOTOXICITY	2.8%	0.5%
HYPERSENSITIVITY	0.8%	4.0%

Menzies: example of Adverse event with INH+rifapentine

- 50 yr Canadian male
- Close contact to TB, PPD+
- Dose #7
- Nausea, abdominal pain
- Dizzy, diffuse aches.
- Sent to ER: BP 60 systolic, Pulse 120
- Looked BAD, admitted to ICU
- Full recover in 24 hrs with steroids, IV fluids

Menzies: Treatment of Hypertension vs. LTBI

Hypertension

- Asymptomatic
- Serious complications
- Treat for years
- Potential side effects
- Close monitoring
- Expensive medications
- BUT no debate about treating!

LTBI

- Asymptomatic
- Serious complications
- Treatment for 9 months
- Potential side effects
- Close monitoring
- Cheap medication
- WHY the debate about treating?

Menzies: What is needed if treatment of LTBI to have impact

BETTER TESTS

- Both PPD and IGRA tests fail to identify those truly at high risk of developing active TB

BETTER TREATMENT

- Shorter
- SAFER - essential

Dr. Schluger

TB Testing in Health Care Workers

- Low incidence of TB in HCW's
- Low TB skin test conversions in HCW's
- High burden of testing on hospitals
- Discussed changing to testing HCW's only if a known TB exposure

October 26, 2012

PENNSYLVANIA TB UPDATE
HARRISBURG, PA

JULY 2012

**WORLD AIDS CONFERENCE
WASHINGTON, D.C.**

World AIDS Conference

- 20,000 attendees
- VIP speakers including:
 - Bill Clinton
 - Bill Gates
 - Whoopi Goldberg
 - Nancy Pelosi

INH for prevention of TB in HIV Pts

- 1,300 HIV patients enrolled
- 3% excluded due to active TB !
- INH vs Placebo
- Followed 1-3 years for TB (definite, probable or possible)
- 37% lower rate of TB in INH arm (2.3 vs 3.6 cases/100 pt years)

JUNE 2012

NATIONAL TB WORKSHOP
ATLANTA, GA

INH + RIFAPENTINE 3HP LATENT TB TREATMENT

- Guidelines support use for LTBI if:
- Recent exposure or PPD conversion
- Healed TB on X-ray
- HIV patients not yet on medications
- >2 years of age

Rifapentine Issues to Consider

- Numerous interactions with other medications (same as rifampin)
- Oral Contraceptives, warfarin, methadone, etc

CDC Guidelines for Weekly INH-RPT DOT, 12 Doses, Children 2–11 Years Old

Small numbers in treatment trials

- No pediatric formulation of RPT
- Recommended if both risks:
 - –Notable risk of TB
 - –Unlikely to complete 9 mo INH

Issues in 3HP Implementation

Some Questions I've Received

- • What does “case-by-case” basis mean?
- • If a patient misses a week, or 2 or 3, do I have to start over?
- Or can the 12 doses be given within a specific extended time frame – say 4 months)?
- • Can I use this in someone with TB infection who is about to start Infliximab (Remicade)?
- • Will insurance cover the cost of the drug to the patient (related to off-label use)?

- Should 3HP be administered DOT only?
- For which situations or patients would self-supervised therapy be acceptable or recommendable?

How should other groups not well represented in Study 26 be included in the guidelines?

- Persons who are diagnosed during targeted testing outside of contact investigations (e.g., screenings at homeless shelters, testing of immigrants)
- Persons with HIV infection
- Children
- Persons at risk for TB because of medical immunosuppression

INH+Rifapentine Not Recommended For...

- • Children <2 yr old
- • Patients taking anti-retrovirals for HIV
- • Women who are pregnant
- • Patients with INH- or RIF-resistant LTBI

Mississippi 3HP Pilot

CONS

- Funding -Medication more expensive –
- 3HP appx. \$156 vs \$19 for 9INH
- Requires 12 vs. 9 nursing visits
- Possibly greater risk of hypersensitivity reaction due to intermittent dosing

Mississippi 3HP Pilot PROS

- 12 weeks vs. 9 months
- Potential of higher completion rates
- Non-inferior, possibly superior, long-term protection
- New / Opportunity

Mississippi DOT for 3HP

- The three delivery methods of (3HP) treatment:
- (1) 3HP N = given by a nurse as directly observed therapy at patient's home or workplace,
- (2) 3HP O = given by an outreach worker/nurse team as directly observed therapy
- (3) 3HP C = given by a nurse as directly observed therapy in clinic

Mississippi

191 treated with 3HP

- 191 Started Meds
- 79 Open
- 74 Complete
- 38 Failed to complete
 - 13 adverse reaction
 - 14 medical advice
 - 5 uncooperative
 - 2 moved out of state
 - 3 lost to follow-up
 - 1 administrative

Guidelines: What's Coming

- New Targeted Testing Guidelines
- ATS, IDSA, CDC collaboration
- AAP participation
- Evidenced-based structure
- Due out in summer 2013

Dr. Fontana
U. of Michigan

- “Hepatotoxicity of Antimycobacterials”
- DILI drug induced liver injury

<https://diln.dcri.duke.edu/>



1-866-UM-LIVER
Robert J. Fontana, MD

Billing for TB Services

- **PPACA and TB – HIT/EHR**
- • Many health departments have no experience coding and billing for TB services
- • TB Programs may need to consider billing for services
- **CDC's Role for Billing for TB Services**
- • Provide links to information, e.g.:
- • NCIRD Billables Project
- • Other TB programs with billing experience
- • Professional Organizations: American Thoracic Society Coding & Billing Quarterly, Medical Association of Billers, American Academy of Professional Coders
- • Private Sites: Coding News, Supercoder, FindaCode, Idea Marketers

TB Legacy – Maybury State Park (Formerly Sanatorium)

NEWS Hometown Weeklies | Thursday, October 25, 2012 (NR) A15



Talking TB

Retired Maybury Sanatorium physician John Romanik addresses an Oct. 9 gathering at the Northville Community Senior Center on the history of the town's tuberculosis hospital. Romanik was the facility's children's ward physician from 1964-69, and discussed how all of the TB cases he oversaw were sometimes debilitating, but never fatal due to the advent of the use of antibiotics. Before the mid-1940s, however, quite a few TB cases were fatal — even with Maybury's prescription of rest and fresh air for its patients. The talk was sponsored by the Friends of Maybury.

JOHN HEIDER | STAFF PHOTOGRAPHER

Nocturnal feathered friends visit Northville, help teach about nature

By Julie Brown
Staff Writer

A barred owl, great horned owl, barn owl and eastern screech owl all found their way to the Northville Community Center Wednesday, Oct. 24.

The "All About Owls" program put on by the Howell Nature Center was sponsored by the Friends of Maybury State Park and the Northville District Library's youth department.

"There were a lot of adults there, too," said nature center naturalist Kathy Frantz, a Howell resident who presented the program. "There were lots of good questions."

Children, teens and adults learned about the nocturnal birds. Frantz noted about 65 percent of injured birds they take in can be released back into the wild. Other injured birds stay and help out with educational programs.

"It helps human beings to understand more," she said. People become more aware of animals and nature "and learn to sort of co-exist with them."

Frantz was a teacher, and now combines that with her love of animals.

"It's very rewarding to educate

people," she said. "That's what I like the most, working with the children and the birds and animals."

She also liked the partnership with the local library and the Friends of Maybury State Park.

"We are a wildlife rehabilitation center," said Dana DeBenham, a Howell resident and the nature center's director. It takes in some 2,300 injured birds, mammals and reptiles each year. The goal is to get them back in the wild, but some are not in any shape to be released so they stay on to help teach. They live in the Wild Wonders Wildlife Park, DeBenham said, which is open to the public seven days a week.

The Howell Nature Center puts on more than 200 programs a year offsite, including library summer reading programs for children.

"July is very busy for us," she said.

It also does some 500 tours a year. "We are celebrating our 30th year of wildlife rehabilitation this year," said DeBenham, on the eve of a celebration of that milestone.

Additional information is available online at www.howellnature-center.org.

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JOHN HEIDER | STAFF PHOTOGRAPHER

Kathy Frantz of the Howell Nature Center displays a barred owl to an Oct. 24 gathering at the Northville Community Center during a program called "All About Owls." Frantz, who also showed a northern screech and great horned owl, discussed where owls live, what they eat, and how they stalk and find their prey so quietly.



A few kids in the audience of the Oct. 25 "All About Owls" presentation look on wide-eyed as Kathy Frantz of the Howell Nature Center displays a barred owl.

