RESPIRATORY GP PEER GROUP

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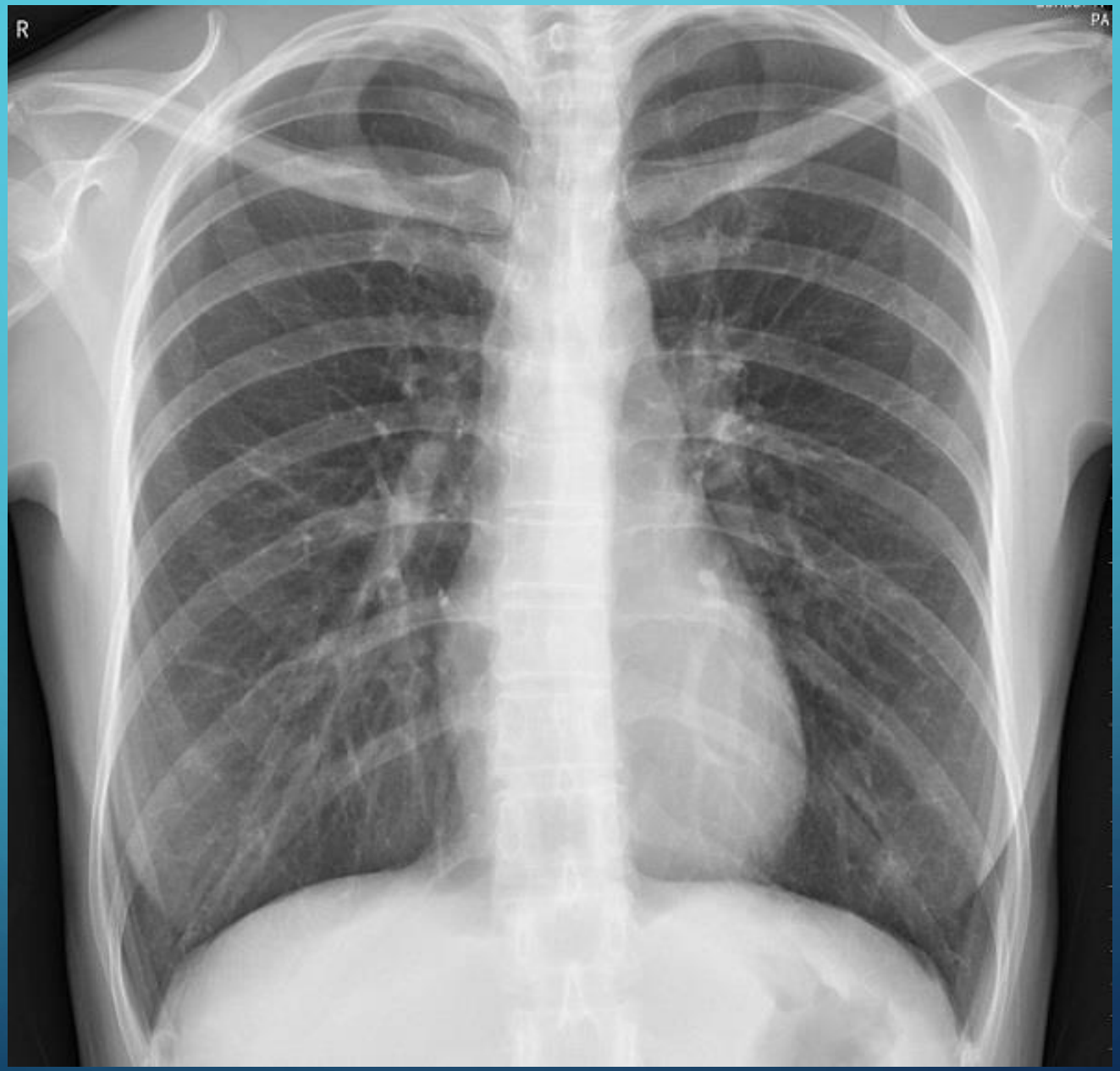
RESPIRATORY PHYSICIAN

26TH JUNE 2018

CASE 1

- 22 year old South East Asian female, presents asymptomatic for routine immigration chest x-ray as part of her visa application. The CXR shows some minor abnormality raising possibility of previous tuberculosis.

- What is the next step?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ISSUES RAISED?

- Who has tuberculosis in NZ?
- When does the patient need hospital admission?
- Role of Mantoux/Interferon gamma assay
- Best tests to prove tuberculosis diagnosis
- Once on treatment what to look out for?

Who has TB?

- 300 or so case of Tuberculosis a year (2014)
- TB in NZ belongs to immigrants ie 75% but 25% NZ born
- 50-60% have pulmonary disease

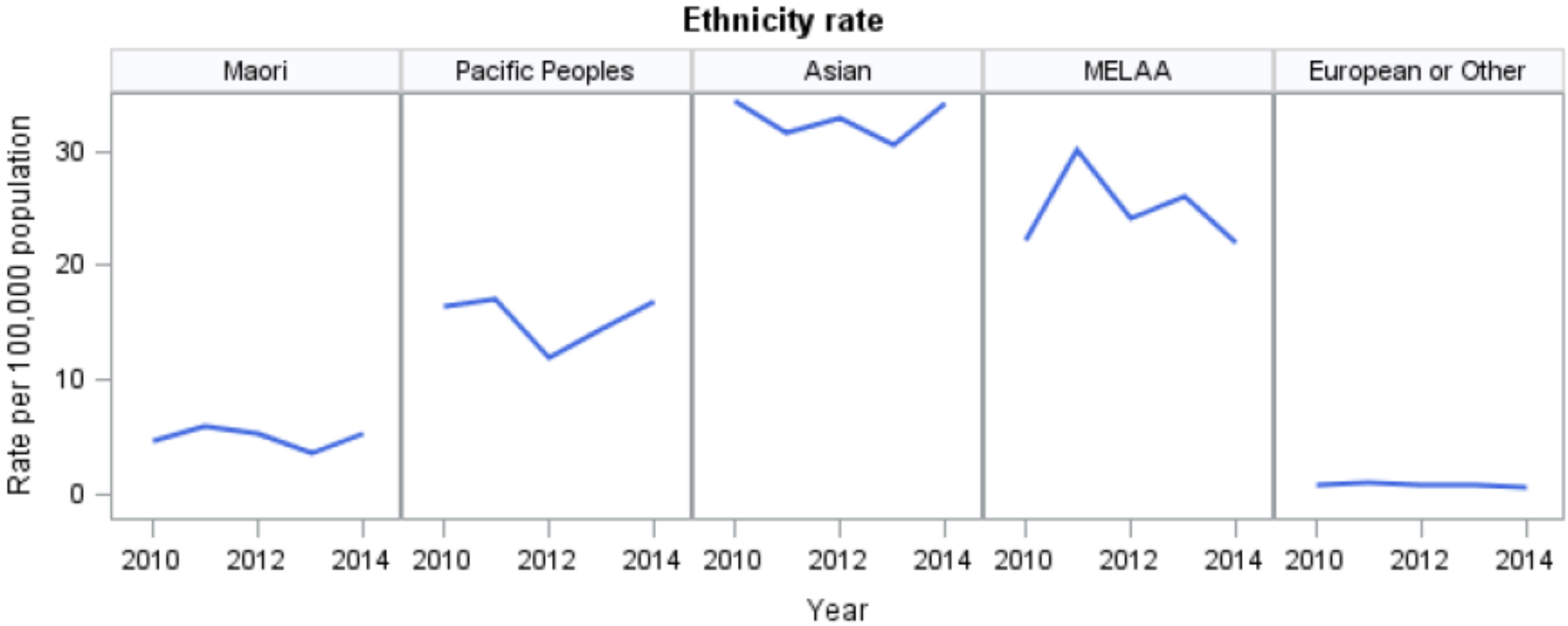
Table 4. Risk factors reported for tuberculosis notifications (new cases), 2014

Risk factor	Cases[a]	Total[b]	%
Born outside New Zealand	222	290	76.6
Current/recent residence with person born outside New Zealand	200	262	76.3
Contact with confirmed case	82	248	33.1
Has immunosuppressive illness	44	279	15.8
Exposure in a healthcare setting	20	263	7.6
On immunosuppressive medication	8	277	2.9
Current/recent residence in an institution	6	272	2.2

[a] Number of cases with 'yes' recorded for the risk factor.

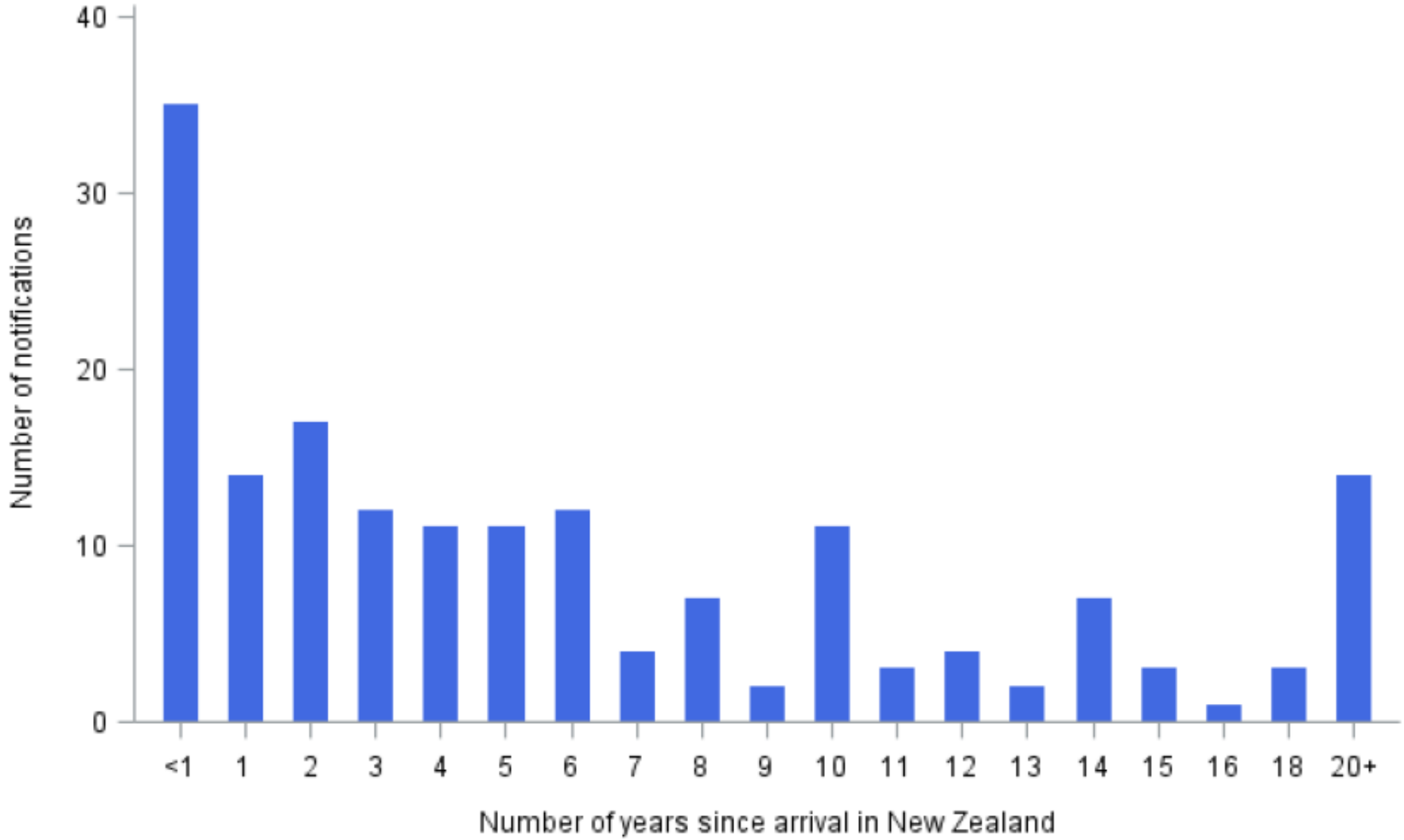
[b] Number of cases for which information was recorded for the risk factor.

Figure 6. Notification rate of tuberculosis (new cases) by ethnic group and year, 2010–2014



MELAA: Middle Eastern/Latin American/African.

Figure 10. Tuberculosis notifications (new cases) born outside New Zealand by the number of years since arrival in New Zealand, 2014



Note: The date of arrival was not recorded for 49 cases.

When to go hospital?

- Unwell/infective ie coughing or risk of multiresistant Tb
- 60% hospitalised

Table 2. Tuberculosis notifications (new cases) by basis of discovery, 2014

Basis of discovery	Cases	%[a]
Symptomatic case presented to health practitioner	217	80.7
Contact follow-up	21	7.8
Immigrant/refugee screening	20	7.4
Other	11	4.1
Unknown	21	-
Total	**290**	

[a] The denominator used to calculate this percentage was the total number of cases for which the information was available.

Latent Tb, Workup, Drugs

- No role in diagnosing active Tuberculosis rather for contact tracing and latent Tb management
- 3x AFB sputa if spontaneous, and induced sputa can be better or as good as a bronchoscopy with much less risk.
- Depends on drugs, but hepatitis is common and age dependent, also vision, neuropathy

- www.tstin3d.com

Reference

https://surv.esr.cri.nz/surveillance/AnnualTBReports.php?we_objectID=4251

CASE 2

- 55 year old male truck driver presents with fatigue and feels unrefreshed with his sleep. He snores and his wife tells him that he stops breathing during his sleep. She is concerned he may stop breathing and never wake up.

- What are the possible diagnosis here?
- Details to clarify?
- What tests are required?
- Are there any legal implications here?
- Who to refer?

Answers case 2

- 1. OSA, Insomnia, sleep restriction, depression, hyopothyroidism, narcolepsy/catalepsy…list goes on….
- 2. BMI, comorbidities, sleep routine and hygiene
- 3. Thyroid functions, Epworth Sleepiness Scale, STOP BANG qs,

SITUATION	CHANCE OF DOZING (use the scale above)
Sitting and reading	
Watching television	
Sitting, inactive in a public place (eg a theatre or meeting)	
As a passenger in a car for an hour without a break	
Lying down to rest in the afternoon when circumstances permit	
Sitting and talking to someone	
Sitting quietly after a lunch without alcohol	
In a car, while stopping for a few minutes in traffic	
	TOTAL

http://www.stopbang.ca/osa/screening.php

Snoring,	Tired,	Observed apnoeas	HyPertension,
BMI> 35,	Age>50,	Neck Circumference,	Gender is Male

NZTA rule

- Driving should be restricted or cease for individuals who meet the high-risk driver profile, as follows:
  - are suspected of having OSA where there is a high level of concern regarding the risk of excessive sleepiness while driving while the individual is waiting for the diagnosis to be confirmed by a sleep study
  - complain of severe daytime sleepiness and have a history of sleep-related motor vehicle crashes or there is an equivalent level of concern
  - have a sleep study that demonstrates severe OSA and either it is untreatable or the individual is unwilling or unable to accept treatment.

ADHB (& WDHB)

We do accept referrals for

- Commercial drivers and heavy machinery operators with suspected sleep disordered breathing and ESS ≥ 10. Please elaborate on high risk occupations in your referral, and note if employment is at risk
- Any driver with a sleep related motor vehicle accident or near miss during the last two years
- High pre-test probability of significant Obstructive Sleep Apnoea (BMI ≥ 35 kg/m^2, loud snoring, witnessed apnoea or choking arousals, retrognathia, ESS ≥ 10 or perceives sleepiness as a problem)
- Non-respiratory sleep disorders (such as narcolepsy, parasomnias) excluding insomnia
- Elective surgical patients if STOP BANG ≥ 5 and ESS ≥ 10 and patient perceives sleepiness as a problem

We do not accept referrals for

- Insomnia (unless concurrent with symptoms of sleep disordered breathing and ESS ≥ 16/24)
- Sleep restriction / shift workers with no suspicion of sleep disordered breathing and sleep time less than 7 hours
- Non-sleepy patients with cardiovascular co-morbidity
- Snorers – *please see below for our snorer patient info*
- Elective surgical patients if STOP BANG < 5 and ESS < 10, or without patient perception of sleepiness as a problem
- We will also return referrals with insufficient clinical information – *you will be invited to re-refer with additional data*