Management of Tuberculosis Summary 2018

Pathways taken from 2016 NICE/BTS

https://pathways.nice.org.uk/pathways/tuberculosis

Yeovil District Hospital Foundation Trust.

Kate Brookman, Senior Respiratory Nurse Specialist.

- Once confirmation of an Index Case is known (Smear +,Clinical or Culture +)…
- Patient to be Nursed in Side-room for first 2/52 of treatment- or longer if treatment is difficult to establish. Some cases can go home if well, and Isolation can be guaranteed .
- DOTS.
- Standard Quadruple drug therapy for 2/12 then Dual Drug therapy for remaining 4/12. Plus supportive medications.
- RNS will start Contact Tracing- Close family and Close daily contacts. Depending on outcome of first group, tracing may be extended.

Prior to starting any TB Drug Treatment

- Liver Function Tests
- Renal Function
- FBC
- Isihara and Visual Acuity.
- Weight –all drugs will be calculated on mg/kg

Drug Therapy..and the common potential side effects ;

- Rifampicin-throughout the 6/12-Itching, Rash, Drug interactions.
- Ethambutol-initial 2/12 then stops. *Visual acuity problems, Optic Neuritis*.
- Isoniazid-throughout the 6/12 -Peripheral neuropathy, therefore good practice to take Pyridoxine for the 6/12.
- Pyrazinamide-Initial 2/12 then stops.Nausea
- (+Corticosteroids in Pericardial or Meningeal TB)

YDH

- Patient to Respiratory Ward side room-9a.
- Staff who may be immunocompromised or pregnant should not be looking after pt during first 2/52
- If pt found to have TB after they have left ward- Pts in the Bay , or anyone immunocompromised should be informed . RNS ‘s will look at level of risk to pts and staff. – Either letter to Pt or just to their GP will follow, stating potential risk level and what to be alert for in future.
- Once pt is home- follow-up is with the Resp Nurse team on weekly then fortnightly basis with Consultant clinic at 3/12 and finally at 6/12 if all runs smoothly !
- Liver function is often deranged due to treatment, therefore Bloods need to be taken weekly until established.
- Difficult Drug regime to follow and complete-many side effects and hence much support needed from CNS.

What does Contact Tracing entail ?

- Clinic appt needed to gain- Current Health Status(Cough, sputum,weight loss, fatigue)
- BCG history
- Tb exposure
- Foreign travel
- Lifestyle risks
- Immunocompromised?
- Children in household?
- Mantoux testing , IGRA or T-Spot TB test
- CXR
- Occupation

Health Protection Agency England (HPE)…..

- Need to know as TB still a Notifiable Infectious Disease.
- Index Case registered on ETS. (National Database)
- Notify at first opportunity- any change or de- notification can happen later if needed.
- Genetic Tracing now available to spot Clusters early and reduce spread/ Incidence form Identifying the Sputum Bacilli Genome.- Useful for Prisons, Nursing Homes, Schools, and Factories. Micro – send to Central UK Laboratory Collindale.
- Lab also gives Sensitivity / Resistance to treatment information.
- New Advice and Guidance line-National.

Difficult cases.

- HPA can offer support to main TB team in legal issues of non- engagement with Health Care provision.
- Social Services- will prioritise Housing issues for TB patients.
- TB ALERT UK national charity-have small pt bursaries to help with £ hardship.
- Communication and flexibility from the whole team !
- Stigma of TB.Information .Language issues.

Nota Bene…

- Mask should be worn *by Patient* if visiting another Dept eg XRay , or if they are coughing profusely during periods of care- for at least first 2/52 .
- Upgrade to a high grade filter mask if any suspicion of MDRTB (Multi drug resistant TB)-both for pt and any staff delivering Care in the room.
- If MDRTB even suspected, pt should be immediately moved to Negative Pressure room or if not available to Neg Pressure room at nearest Hospital .
- All staff should have had a BCG- it is not a ‘secure Vaccine’ though.

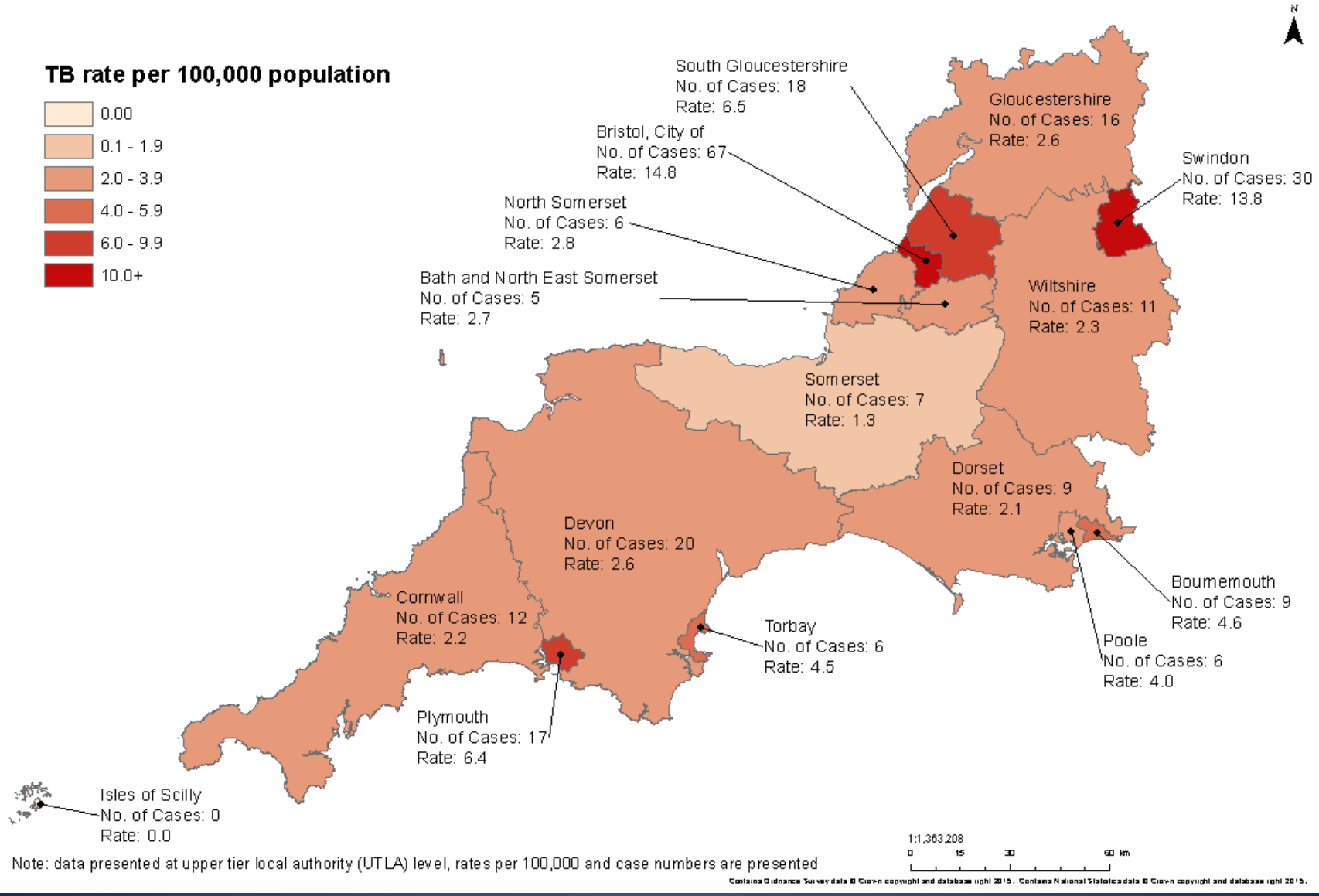
- Dietician input nearly always required.
- All TB drugs to be given 1 hr pre Breakfast – usually with Anti-emetic support.
- Pyridoxine orally given to prevent peripheral neurological damage.(from Isoniazid)
- All secretions, Urine, Faeces, tears will look a ‘rusty red’ colour –means the Rifampicin is being absorbed well –warn patient.
- Beware Contact lenses- need to stop using unless they are the daily change ones.

Main issues with Tb Drug therapy

- Nausea and vomiting
- Itching
- Rash
- Jaundice
- Ocular disturbance (hence need Isihara eye test prior to starting treatment)-Ethambutol
- Deranged Liver Function.
- CNS monitors all the above and has all the Patient information leaflets ‘TB Alert’.

What can possibly go wrong!

- Compliance -Long Course of treatment and once feeling better there is huge temptation to stop .
- Intolerance-address Nausea early and warn at the beginning of treatment- improves as they progress.
- First line therapy intolerable-Rash, Itching-if mild can be treated with regular antihistamine.



Note: data presented at upper tier local authority (UTLA) level, rates per 100,000 and case numbers are presented

Our Locality numbers.

- Total of 239 cases in Southwest peninsula
- Wilts 11
- Bristol 67
- Plymouth 17
- Teignbridge 7
- Torbay 6
- N.Somerset 6
- S.Somerset 2
- Mendip 2
- Taunton Dean 3
- E.Dorset 2
- Weymouth/Portland 3

Out of the 239 total..

- 15% had Social Risk factors indicators of either
- Alcohol abuse
- Drug Misuse
- Homelessness or
- Imprisonment.

Out of the total 239..

- Only 4 Cases were Resistant to 1st line TB drugs, and only 2 of those were classified as MDR/TB.
- Still slightly more males than females, and the highest age group for diagnosis is in20's-30's.
- Of the Non-UK born groups, the highest incidence remains in the Indian,Romanian,Pakistani and Somalian communities.

Something good to end on…

- The rate of TB transmission in the newborn is now at its 2nd lowest since yr 2000.
- We are entering a ‘Cover’ for outbreak negotiation between the Acute Trusts in the SW. to share skilled staff in any area to help with sudden need/outbreaks.
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