

subcarinal (level 7; 81.8% of patients), right lower paratracheal (level 4R; 58.2%) and right hilar (level 10R; 52.7%) stations. The Abstract P167 Table 1 shows correlation of biomarkers and CXR abnormalities with extent of LN involvement on CT. Results are displayed as % group or median (IQR). There were 49.1% with a normal CXR. In this subgroup, ESR and Globulin levels also correlated with extent of LN involvement on CT. The median (IQR) LN involvement stratified by ESR levels was: 2 (1–2), 2 (1–2.8) and 5 (4–5) for ESR ≤15, ESR 16–49 and ESR >49 mm/h, respectively (p=0.039). The median (IQR) LN involvement stratified by Globulin levels was: 2 (1–3), 2 (2–4.8) and 5 (2.8–5.3) for Globulin ≤35, Globulin 36–45 and Globulin >45 g/l, respectively (p=0.048).

Abstract P167 Table 1

Number of LN stations involved	Globulin (g/l)	ESR (mm/h)	Abnormal CXR (%)
1–3 (n=26)	36.5 (32–39)	23 (9–28)	19.2
4–6 (n=24)	42 (35–50)	67 (45–96)	41.7
>6 (n=5)	45 (40–50)	84.5 (62–96.5)	80
p-Value	0.03	0.004	0.03

**Conclusion** Tuberculous mediastinal lymphadenopathy on CT is characterised by a specific anatomical pattern with predominance of right sided LNs and more frequent involvement of particular LN stations. A large proportion of patients with pathologically enlarged LNs on CT have normal CXRs. Biomarkers such as ESR and globulin levels correlate with extent of LN involvement on CT.

**P168 RIFABUTIN IS A USEFUL ALTERNATIVE TO RIFAMPICIN IN THE TREATMENT OF ACTIVE TB/HIV CO-INFECTION**

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**Introduction** Effective short course anti-tuberculosis treatment (TB Rx) requires use of a rifamycin, typically rifampicin (RIF). However, in patients with TB/HIV co-infection it has significant drug interactions; and rifabutin (RBT) is often substituted in those taking anti-retrovirals (ARVs). Recent data suggest that the recommended dosage of RBT may be inadequate with concomitant ARVs, leading to an increased risk of subsequent rifamycin resistance after apparent successful treatment.

**Aims** We undertook a retrospective, single-site review of TB/HIV treatment to determine the impact of rifamycin selection on prevalence of serious (ACTG grade III or IV) adverse events (AE), TB treatment completion and TB recurrence.

**Methods** The characteristics and treatment outcomes, stratified by rifamycin type and ARV use for all adults with TB/HIV co-infection receiving rifamycin-based therapy as part of active TB Rx from 1997 to 2008 were examined. Rifamycin choice and dosage was in line with BHIVA guidance for TB/HIV therapy—in general RIF being used with a non-nucleoside inhibitor ARV combination and RBT with boosted protease inhibitors.

**Results** 143 HIV-positive individuals received rifamycin-based TB Rx during the study period (64 RIF, 56 RBT and 24 RIF/RBT in treatment switch—see Abstract P168 Table 1). 103/143 (72%) patients had culture positive disease, of whom 4 had isoniazid drug resistance. 106/143 (74%) patients used ARVs during TB Rx. Patients on ARVs who had RIF either alone, or switched from RIF to RBT during TB Rx had a higher incidence of serious AE compared to those prescribed RBT alone (p=0.002). There was no difference in the percentage of patients who completed prescribed TB Rx between the RIF and RBT groups (p=0.6). After a median follow-up

of 3.2 years from start of TB Rx, 4 patients relapsed, all with a drug sensitive organism.

Abstract P168 Table 1 Rifamycin

	No ARVs during TB Rx		ARVs during TB Rx		
	RIF n=34*	RBT n=1	RIF n=28	RBT n=54	RIF + RBT n=24
Black-African	22 (65%)	1 (100%)	21 (75%)	37 (69%)	20 (83%)
Blood CD4 count (cells/mm <sup>3</sup> )	350 (7–831)	132	123 (13–500)	124 (2–844)	61 (11–233)
Completion of prescribed TB Rx	30 (88%)	1 (100%)	27 (96%)	52 (96%)	23 (96%)
Grade III/IV AE	14 (41%)	0	20 (71%)	17 (31%)	16 (67%)
Recurrence of TB	1 (3%)	0	2 (7%)	1 (2%)	0

Entries are number (%) or median (range).

\*2 RIF pts had unknown ARV status

**Conclusion** Within our study population, rifabutin is a useful alternative to rifampicin in the treatment of active TB/HIV co-infection and does not appear to lead to subsequent rifamycin resistance after successful therapy. We find no evidence in this analysis to change the advice within the current national TB/HIV guidelines.

**P169 SUBCLINICAL OCULAR MANIFESTATIONS OF PULMONARY AND EXTRAPULMONARY TUBERCULOSIS IN A HAMPSHIRE POPULATION**

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**Background** Intraocular tuberculosis capable of imitating numerous uveitis entities; the ability of TB to cause uveitis is multifactorial including virulence of the infecting organism, an individual's immune response, and the location of the disease. The non-specific nature of uveitis makes diagnosis difficult, and allowed to progress unchallenged, intraocular tuberculosis can be sight-threatening. We postulate that subclinical ocular signs of TB might coexist with TB active at other sites.

**Methods** 14 TB latent, 14 TB active, and 3 TB-HIV co-infected patients were recruited for this pilot study, between October 2009 and April 2010, from the TB service at the Royal South Hants Hospital. At Southampton General Hospital's Eye Unit patients provided detailed ocular and tuberculosis histories; all patients then underwent a series of extensive ocular examinations, including best corrected visual acuity and colour vision, intraocular pressure, pupillary response, ocular motility, slit lamp and dilated fundus examinations; finally each patient's ocular findings were correlated against their TB and TB-HIV co-infection clinical profiles.

**Results** 14 patients were classified "latent TB" (IGRA positive, asymptomatic) and 14 patients were classified "active TB" (symptoms, culture positive) of whom three were "TB-HIV co-infected". Patients with active TB were identified as having significantly more symptoms associated with anterior uveitis, such as pain, photophobia, redness and blurred vision/floaters, compared to those patients with latent TB. We demonstrated objective evidence of anterior chamber inflammation in patients with active disease, but not latent disease. The patients with HIV coinfection exhibited combined anterior and posterior segment abnormalities consistent with an active uveitis.

**Conclusions** The results of this pilot study suggest that patients with active TB have symptoms suggestive of uveitis, but these are unrecognised by the patient unless specifically sought. These patients have anterior chamber findings of uveitis. TB-HIV co-infected patients appear to present asymptotically with anterior