

## **Clinical Round-up March 2016**

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### **Improving HIV testing in out-patients**

Diagnosing the 17% (PHE 2015) of individuals who are unaware of their HIV status remains one of the biggest challenges to sexual health. Lascar et al describe an innovative quality improvement project which we can learn much from. Based in a high prevalence area they implemented opt-out testing via a routine blood test and secondly implemented a rapid walk-in HIV testing service in the out-patient (OP) department for patients and the general public. The team had previously assessed missed opportunities for HIV testing and identified a high number (77%) of late diagnoses and intensive care admissions, they had also identified OP as the most common setting for missed opportunities for testing and diagnosis. The number of OP referred for an HIV test rose from 420 (in 2010) to 676 (in 2013) in the same 9 month period and 148 accessed rapid HIV testing, 127 attending out-patients and 21 were members of the general public. Two new HIV diagnoses were made and 1 patient was identified who was known to services but had disengaged from care. The authors describe clearly the practicalities and real benefits (financial and otherwise) of setting up such a service in an area of high prevalence (4.3%). This paper highlights that such a service is possible and challenges us to think of what we can do in our own settings.

### **Annual HIV testing**

Van Handel et al<sup>2</sup> in the USA continue this theme looking at factors associated with HIV testing in high risk individuals, defined by the CDC as; injecting or other drug users, MSM, sex-workers, partners of HIV positive individuals, and those with >1 partner since their last HIV test. Annual HIV testing is recommended in these groups and one goal of the National HIV/AIDS strategy was to diagnose 90% of those living with HIV by the end of 2015. Data was collected through the National

Survey of Family Growth (NSFG), a multi-stage probability sample of men and women in the USA aged 15-44, to identify high risk individuals and look at HIV testing patterns. 'High risk' respondents to the NSFG were divided into 3 groups according to their history of HIV testing ; tested in past 12 months (recent), greater than 12 months and never tested. The hypothesis was that those who had 'ever' tested would be different to those who have 'never' tested. In fact those who tested > 12 months ago shared similar attributes to those who had never tested. The authors summarise from this that the same groups of high-risk groups that do not test annually are the same as those who have never tested. Two thirds of high risk men (70.7%) and women (62%) had not recently tested. In both men and women, those of black ethnicity and who had visited a doctor in the past year were more likely to have tested, as were women who had been pregnant and older men (aged 40-44 vs 15-19). There may be good reasons why these groups are more likely to test regularly and this papers' findings may well be USA specific but it does highlight how many high risk individuals are not being reached, despite ongoing risks and prompts us to think about our own high-risk populations and how to access them.

### **Azithromycin vs Doxycycline**

In their randomised trial published recently Geisler et al<sup>3</sup> looked for non-inferiority of azithromycin to doxycycline when treating uncomplicated urogenital Chlamydia (CT) infection. Patients were recruited from a youth correctional facility, providing a more controlled environment in which to study the efficacy of these two agents, and medication was given under directly observed therapy (DOT). 567 participants aged 12-21 years (diagnosed with CT on admission to the facility) were enrolled; 284 received azithromycin (single dose) and 283 took doxycycline (at least 10 doses). 65% participants were male. 155 (55%) participants in each arm made it to follow up at day 28. There were no treatment failures in the doxycycline group (95% CI 0.0 to 2.4) and 5 (3.2%; 95% CI 0.4 to 7.4) in the azithromycin group, 4 male (3.9%) and 1 female (1.9%), giving an efficacy of 97% for azithromycin and 100% for doxycycline. Strains of CT were compared between baseline and

repeat testing in the treatment failures and those with differing strains were considered to be new infections. All were asymptomatic. The authors rightly point out that concerns over adherence with doxycycline are eliminated in this setting and these results may not be generalisable to a clinic setting enough to influence current prescribing practice. Postulated reasons for azithromycin failure include insufficient drug levels to eradicate CT and/or inadequate genital tract levels. Either way, efficacy to both treatment options was high so it is unlikely we will be changing current prescribing practice any time soon.

### **References**

1. Lascar M, Freer J, Phiri E. Br J Hosp Med (Lond). Tailoring HIV testing in a setting of late HIV diagnosis: is the tide turning? 2015 Oct;76(10):592-5.
2. Van Handel M, Lyons B, Oraka E et al. Factors Associated with Time Since Last HIV Test Among Persons at High Risk for HIV Infection, National Survey of Family Growth, 2006-2010. AIDS Patient Care STDS. 2015 Oct;29(10):533-40.
3. Geisler WM, Uniyal A, Lee JY et al. Azithromycin versus Doxycycline for Urogenital Chlamydia trachomatis Infection. N Engl J Med. 2015 Dec 24;373(26):2512-21.