CLINICAL PRACTICE

Update

Epidemic syphilis exhibits diverse manifestations

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There are recent reports of a sustained increase in the incidence of syphilis around the world, including in the Australian cities of Sydney and Melbourne.[1,2]

In Queensland, there has been both an increase in the number of notifications (*Figure 1*) and also a change in the epidemiology of the disease. While syphilis was previously predominantly seen in indigenous men and women, it now mostly occurs in nonindigenous men who have sex with other men (*Figure 2*) – although per capita, indigenous Queenslanders remain over-represented. Efforts to improve screening and treatment have shortened the time from diagnosis to treatment and appear to have been successful in reducing the rates of disease in remote indigenous populations.[3] These efforts have included the establishment of a state wide syphilis register and active encouragement to remote practitioners to offer testing to patients aged 15–39 years as a part of the annual adult health check. Adoption of single dose azithromycin for syndromic treatment of urethritis and cervicitis and their contacts, albeit at a dose of only 1 g, may be having an impact as well.[3]

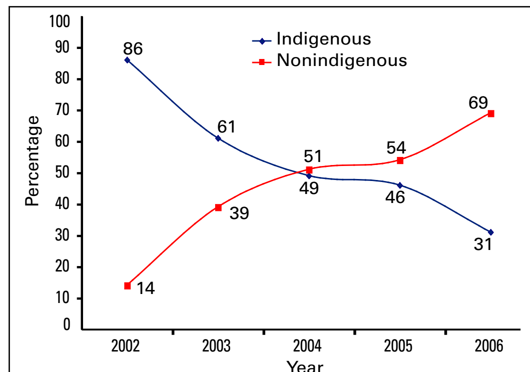

Figure 1. Notifications in Queensland
Figure courtesy Communicable Diseases Branch, Queensland Health

The authors have seen a range of presentations of active syphilis in our Brisbane health services over the past 12 months (*Table 1*). This contrasts to a previous local report where, despite energetic searching in an urban setting, only two early cases were seen over a 5 year period.[4]

Table 1. Presentations of active syphilis over 12 months

Patient	Rapid plasma reagin	HIV infected	Symptoms
A	64	Y	Rash, fever
B	64	Y	Rash
C	64	Y	Partial third nerve palsy
D	256	Y	Uveitis, tinnitus, alopecia, penile ulcer
E	128	N	Rash, Bell's palsy
F	512	Y	Panuveitis
G	128	N	Mucous patch, sore throat
H	16	Y	Asymptomatic
I	128	N	Third nerve palsy
J	128	Y	Rash, fever
K	128	Y	Asymptomatic
L	64	N	Uveitis, retinitis
M	64	Y	Mucous patch, sore throat
N	256	Y	Lancinating leg pains
O	256	Y	Concurrent rash and chancre
P	128	Y	Rash, fever
Q	128	Y	Rash, lancinating leg pains
R	64	Y	Oral mucous patch, sore throat, rash

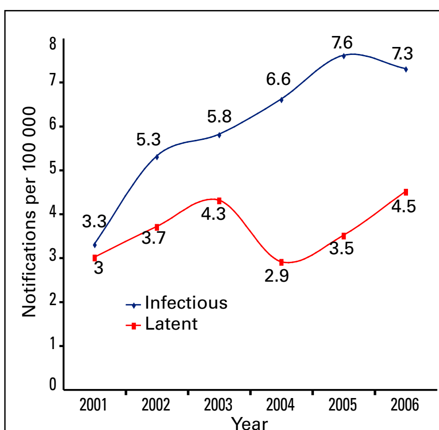

Figure 2. Occurrence of syphilis in indigenous and nonindigenous patients
Figure courtesy Communicable Diseases Branch, Queensland Health

It is noteworthy that the worldwide resurgence of syphilis is reaching into smaller centres such as ours. A number of our patients have reported likely transmission by unprotected oral intercourse, which may be

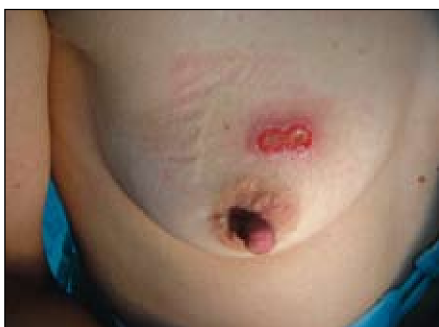

Figure 3. Primary chancre on breast
Image courtesy Brisbane Sexual Health and AIDS Service

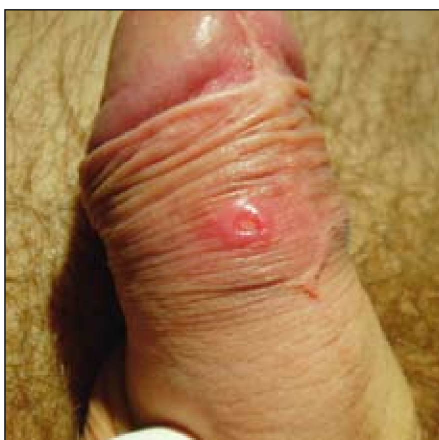

Figure 4. Primary chancre on penis
Image courtesy Brisbane Sexual Health and AIDS Service

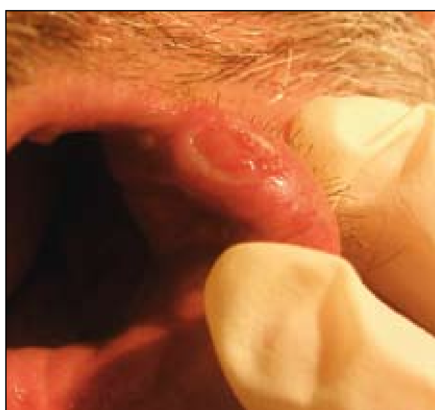

Figure 5. Primary chancre on lip
Image courtesy Brisbane Sexual Health and AIDS Service

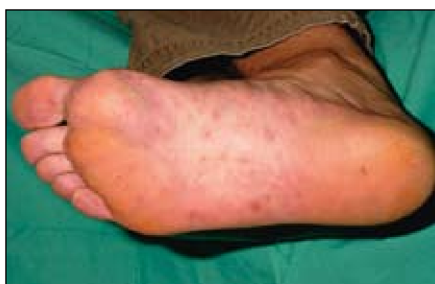

Figure 6. Rash of secondary syphilis
Image courtesy Infectious Diseases Unit, Royal Brisbane and Women's Hospital

perceived as a lower risk sexual practice in the era of HIV/AIDS. The rising incidence of HIV and gonorrhoea[5,6] suggests that adherence to safer sex practices may be diminishing.

Testament both to the fact that syphilis has been uncommon for some time in urban settings and that its manifestations are so diverse, a number of our cases had been seen by several health professionals before the diagnosis was entertained, including a hospital admission in one case.

We would like to remind readers of the value of taking a sexual history, of being aware of the changing epidemiology of this previously waning but now waxing disease, of regular screening for sexually transmitted infections in those at risk, irrespective of practice location, and to be aware of the range of clinical presentations of syphilis (*Figure 3–6*).

Conflict of interest: none declared.

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