by **Philip Carabot**Consultant in GU Medicine GU Clinic, Boffa Hospital

Sexually Transmitted Infections (STIs) are very common, with an estimated 330 million new cases yearly. They are the cause of serious morbidity (e.g. pelvic inflammatory disease, tubal infertility and ectopic pregnancies), as well as congenital and neonatal complications and even death. WHO estimates that, in Malta there could be up to 13,000 new cases per year, but this remains speculative.

This short report summarises the STIs and related conditions, seen in 2005 at the GU Clinic. This, of course, cannot be extrapolated to gauge any trends in the country as a whole and should not be interpreted as such. We need national prevalence studies for this information.

There were a total of 1832 attendances, a 15% increase over 2004. 74% were new patients, in keeping with the clinic's policy of offering follow-up visits only if strictly indicated. More time can then be thus dedicated to new cases.

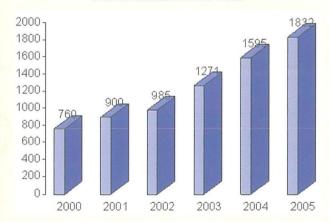
174 of the new patients were non-residents. The male: female ratio was 1.6:1. The female attendances have gradually increased over the years, compared to a preponderance of males (M: F 2.3:1) in 2000.

Patient self-referral remains the most popular at 78% of the total. Caritas referrals account for 4.6% and doctor referral remains low at 16.8% (precisely the percentage for 2004).

As to sexuality 89% were heterosexual, 8% MSM (men who have sex with men) and 3% bisexual. Only one patient admitted to being lesbian.

The young (13-25 years) remain a significant group accounting for 48 %. The youngest patient was 13 years old and the oldest was 78.

Total attendances 2000-2005



15.8% of heterosexuals admitted to having anal sex, at least occasionally, whereas 89% of MSM performed anal sex regularly.

The failure to attend rate was 21%. GU patients are well known to expect prompt consultation, and do not keep appointments considered to be too long. Ideally patients should not wait for more than 48 hours for an appointment. Urgent cases *are* seen within 48 hours. These are:

The Scars

- 1. males with a urethral discharge;
- 2. males and females with genital ulcers;
- 3. patients 16 years old and younger, (especially if female);
- 4. if pregnant;
- 5. victims of sexual assault.

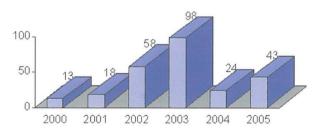
1. CHLAMYDIA

Globally Chlamydia trachomatis is the most prevalent sexually transmitted bacterial infection. Approximately 70% of the infections in women and 50% in men are asymptomatic or subclinical.

Up to 2003 testing was done with an EIA, which has well known limited sensitivity and specificity. 2004 saw the introduction of PCR testing which is much more accurate.

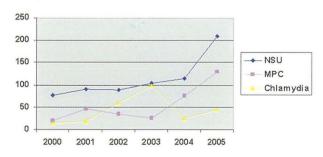
The GU Clinic report of 2004 expressed concern about the seemingly low numbers of chlamydia positives which coincided with the introduction of NAAT.

The 43 cases diagnosed in 2005 are a significant increase over 2004.



Chlamydia positives 2000-2005

On the other hand there were 209 cases of non-specific urethritis (NSU) and 129 cases of muco-purulent cervicitis (MPC). Chlamydia should be the cause in 30-50% of NSU and 25-45% of MPC. However in our patients the rate of chlamydia positivity was 11% and 0.2% respectively. We are therefore either over-diagnosing non-specific infection or under-diagnosing chlamydia. The problem highlighted in 2004 persists.



Non-specific infection 2000-2005 (NSU: non-specific urethritis, MPC: muco-purulent cervicitis,)

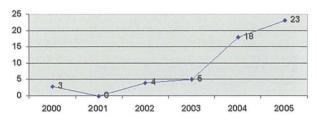
2. GONORRHOEA

There were 23 cases of gonorrhoea diagnosed; 20 in males and 3 in females. Although the actual total is small there has been an increase of 28% over 2004. The number almost certainly does not reflect the national prevalence. Many, if not most, of patients with acute symptoms, both male and female, are treated by other practitioners with broad-spectrum

of Venus

antibiotics and without investigations. Many patients attend the clinic having already had different antibiotics often prescribed, but also bought over the counter.

Of concern are that 4 cases of the 23 (17%) were resistant not only to penicillin but also ciprofloxacin which is the current first line treatment. First line treatment is dependent on the premise that more than 95% of the local strains are sensitive to it. The numbers are too small to suggest changing treatment policy, but we do need national prevalence studies to evaluate the true state of affairs.



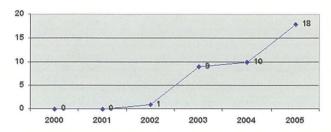
Gonorrhoea 2000-2005

3. SYPHILIS

With the safer sex practises brought about by the fear of AIDS, syphilis had become almost extinct in the mid-1980's. However human nature being what it is, and people becoming complacent about HIV disease, mistaking the advances in

treatment for a cure, all acute STIs especially syphilis have made a dramatic come-back reaching epidemic proportions in Eastern Europe, but not confined there. In 2002 the U.K. reported a 73% increase in males and 33% in females.

In Malta there were only 3 cases of syphilis diagnosed in the 25 years, (and none for the 15 years), before the year 2000. The situation has changed.

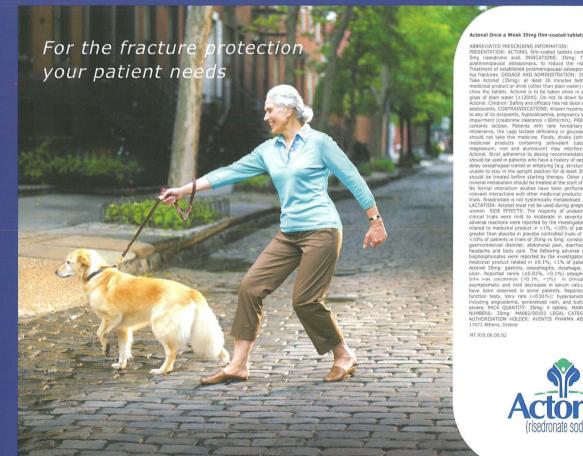


Cases of syphilis 2000-2005

Cases of syphilis rose by 80% (from 10 cases in 2004 to 18 cases in 2005). 14 cases were early disease and therefore infectious, while the other 4 were late and by definition probably not. While 4 patients were non-Maltese they were all permanent residents.

Of note is one patient who was also HIV positive. Contact tracing could only be done with 3 patients.

continues on page 20



Adult immunisation – an overview

continued from page 4

Some would recommend meningococcal vaccine as well, especially in persons over 25 years of age and university attendees. BCG is not usually recommended to persons aged over 16 years as the data for its effectiveness is not available. However, it may be recommended to high risk groups where risk of exposure is high.

Travel related immunisations have increased in proportion with travel to areas at risk of specific infections. This is especially important in travel to Africa, South-East Asia and South America but not exclusive to these areas. Some travellers to forests in Northern Europe for example, may need cover for tickborne encephalitis. It is thus important to consult the latest travel advice according to the destination and planned activities in that country.

The challenges of the future include vaccines for HIV and hepatitis C. Up till now, these remain elusive, although graded successes are recorded in both fields. One of the latest HIV vaccines on trial showing promise uses a disabled form of an adenovirus to ferry three specific HIV genes into the body. Other organisms being targeted include malaria and leishmania, now that both their genomes have been sequenced.

Some vaccines may protect against tumour development. The most well known is hepatitis B vaccine protecting against hepatoma. Other potential targets include papilloma virus, Ebstein-Barr virus, and human T-cell lymphotropic virus I and II. Vaccines against diseases which are non-communicable, like Alzheimer's disease,

have also shown some promising results in animal studies.

Bibliography

- 1. Disease Surveillance Unit. Annual Report 2003. Department of Public Health, Malta.
- 2. Immunisation against Infectious Diseases (the 'Green Book') 2006. Department of Health UK.
- 3. Ada G. Advances in immunology: Vaccines and Vaccination. N Engl J Med 2001; 345:1042-53.
- 4. Vaccination of Individuals with Uncertain or Incomplete Immunisation Status 2004. UK Health Protection Agency, Immunisation Department.

S E X U A L M E D I C I N E

The Scars of Venus

continued from page 17

Details of VDRL/TPHA serology (2004 cases)

Patient	VDRL	TPHA
1 2 3 4 5 6 7	1:32 Negative Negative Negative Negative Negative Negative 1:8	1:2560 1:320 1:160 1:320 1:80 1:320 1:5120
8 9 10	1:8 1:16 1:4	1:40960 1:40960 1:40960

It is still common practicse to screen for syphilis with only a VDRL. This can often be negative, in both early as well as late disease. The international guidelines are to use VDRL and TPHA/or EIA. The VDRL, when positive is useful to monitor treatment.

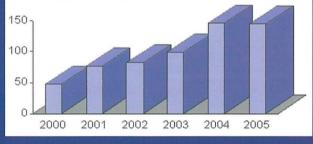
5 of the patients had a persistently negative VDRL, and the diagnosis would have been missed.

Clinicians need to be made aware of the reappearance of this insidious disease, and to screen appropriately.

4. ANO-GENITAL WARTS

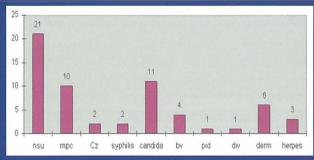
There were 145 cases of ano-genital warts which is a 32% increase over 2003.

Ano-genital warts (first presentation) continue to be a significant proportion of the total number of diagnoses (14%). The increase over the years has been maintained.



Ano-genital warts 2000-2005

Genital warts are associated with other significant pathology in 22% of cases. In this series the following additional (and unsuspected) conditions were found.



Ano-genital warts- associated pathology

This again highlights the importance of fully screening all new presentations of genital warts, before embarking on ablative therapy.

Part II will be published in the next issue