

Recommended ceftriaxone dose for gonorrhoea now 500 mg IM stat

Dear Editor,

I am writing regarding the treatment guideline for gonorrhoea which you recommend as ceftriaxone 250 mg stat ("Antibiotic choices for common infections", *bpac*^{nz} 2011). Best practice guidelines on the Sexual Health Society website recommend ceftriaxone 500 mg. This was reiterated by doctors from Auckland Sexual Health, at a recent conference. I understand that 250 mg is acceptable but we mostly use 1 g vials, so it is easier and more accurate to reduce by half to 500 mg.

*Jody Macdonald, Clinical Nurse Specialist
Palmerston North*

The New Zealand Sexual Health Society has recently changed its recommendation for gonorrhoea treatment from 250 mg ceftriaxone IM stat (in 2009),¹ to 500mg IM stat (in 2012),² given with azithromycin 1 g stat to cover concurrent chlamydia infection. This increase in dose has been recommended to overcome emerging resistance of *Neisseria gonorrhoeae* to cephalosporins.³ It should be noted that although the relevant subsidy requirement for ceftriaxone is "treatment of confirmed ciprofloxacin-resistant gonorrhoea", the prevalence of ciprofloxacin resistance is as high as 54% in some areas in New Zealand.⁴ Ceftriaxone is available in 500 mg and 1 g formulations for injection.

There is an update of recommendations for the treatment of sexual health conditions scheduled for Best Practice Journal in 2013. This will include the following recommendations where ceftriaxone is part of the treatment regimen:

- Gonorrhoea – ceftriaxone 500 mg IM, stat + azithromycin 1 g stat
- Pelvic inflammatory disease – ceftriaxone 500 mg IM, stat + doxycycline 100 mg, twice daily, for two weeks (or azithromycin 1 g stat, repeated in seven days) + metronidazole 400 mg, twice daily, for two weeks
- Acute non-specific urethritis (with purulent discharge) - ceftriaxone 500 mg IM, stat + azithromycin 1 g stat
- Epididymo-orchitis (STI pathogens suspected) - ceftriaxone 500 mg IM, stat + doxycycline 100 mg, twice daily, for at least two weeks

References

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The role of digital rectal examination in prostate cancer follow-up

Dear Editor,

I am a little confused over a point made in your latest Best Tests (Oct, 2012). I am sure I heard Dr Costello tell us on several occasions at the GP CME conference in Dunedin in August 2012, that 6 – 12 monthly DRE was still necessary in prostate cancer follow-up, no matter what the grade as there is a risk of the cancer undifferentiating which makes PSA unreliable.

*Dr Phil White, General Practitioner
Dunedin*

Dr Costello provided expert guidance in the development of our article: "Following up prostate cancer in primary care", Best Tests (Oct, 2012). Most guidelines recommend that routine digital rectal examination (DRE) is generally not necessary in men where regular PSA testing indicates no change from baseline (but would be indicated if change occurred). DRE is not very useful after radical prostatectomy because early local recurrence is not usually able to be felt. After radical radiotherapy, it may be difficult to distinguish between scar tissue and residual or recurrent cancer. Therefore, DRE is regarded as being of limited clinical value in these situations. The exception is in men who have had high grade prostate cancers, i.e. Gleasons 9 and 10, where DRE may be of more value as PSA may not be representative. This is an area of some disagreement, however, and guidelines do vary.

There is some evidence that adding DRE to regular PSA testing for a small subset of patients with poorly differentiated, high Gleason score prostate cancers may reduce prostate cancer related death.¹ Routine DRE is not, however, necessary as part of follow up in all men with prostate cancer. It is recognised that poorly differentiated prostate cells leak PSA at a lower rate than well differentiated cancer cells. De-differentiation (the change of cancer cells to a poorly differentiated state) may lead to a slower rise in PSA level than the disease level might indicate. There have been cases studies illustrating the progression to metastatic disease without an elevation in PSA level. It is estimated that the incidence of developing metastatic prostate cancer following radical prostatectomy, without a rise in PSA, is of the order of 2.3 – 2.6%.^{2,3} It is also recognised that small cell prostatic cancer is not associated with PSA expression.

It should be noted that there is a small potential for radical radiotherapy to induce rectal cancer after a period of years, therefore, there should be increased vigilance for this.

New Zealand-specific guidelines are likely to be produced soon as the Prostate Cancer Taskforce has now released a working consultation document, so recommendations may change in the future.

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References

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Heterophile antibody vs EBV serology testing for glandular fever: Best Tests (Oct 2012)

Dear Editor,

A few months ago I was advised by the local lab not to order Paul-Bunnell or Monospot, i.e. heterophile antibodies, to aid glandular fever diagnosis because of its inaccuracy and they advised EBV serology instead. I am pretty certain there were no particular features about the patient in question.

*Dr Phil White, General Practitioner
Dunedin*

Firstly, if the patient has clear clinical features suggesting glandular fever, and no other complications, testing may not be necessary at all.

Heterophile antibody testing, most commonly with the Monospot test, is highly accurate in a person with symptomatic, suspected glandular fever when interpreted in conjunction with a full blood count. In a typical, symptomatic patient, heterophile antibodies have a high sensitivity and specificity. The exception to this is in the first week of illness; if the patient has only recently developed symptoms then the sensitivity is lower and false-negatives will occur in approximately 25% of people. In this case EBV serology may be more appropriate. In addition, false-positives can occur in people with other conditions, such as HIV.

When taken in the context of the atypical antibody film from the full blood count, the results of a Monospot are sufficiently accurate for most immunocompetent people (excluding pregnant women and young children). As glandular fever is not a notifiable disease, is generally uncomplicated and has a life-time prevalence of 90%, more accurate testing (i.e. EBV serology) is probably not necessary.

That being said, laboratories are not standardised across New Zealand and individual requirements and recommendations differ. While New Zealand and international guidance would indicate that heterophile testing plus atypical antibodies is sufficient, if your local laboratory requires EBV serology, it is best to adhere to their recommendations.