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Stating the evidence

Statin therapy has again come under the spotlight with the release of new evidence in the form of the forthcoming update of NICE CG67 Lipid Modification guideline, a Quality and Productivity QOF indicator, and the need for health boards to make prescribing efficiencies whilst maintaining evidence-based quality care.

For primary prevention a recent Cochrane review¹ confirms that statins reduce all-cause mortality (Relative Risk 0.83; 95% CI 0.61-0.79) when used in people at higher risk of cardiovascular (CV) disease. Eleven of the 14 trials included were for patients with hypertension, diabetes, raised lipids and microalbuminuria. This review supports recommending statins to patients with a 20% or greater 10-year CV event risk.

The Lothian Joint Formulary (LJJ) recommends that the first-line agent for primary prevention should be simvastatin 40mg. If this is not tolerated then a lower dose could be considered (simvastatin 20mg is on the LJJ) or an alternative statin. There is no need to monitor cholesterol levels in patients on a statin for primary prevention, though LFTs should be checked at three and 12 months. Subsequently, LFTs need only to be checked if clinically indicated.²

For secondary prevention there is irrefutable evidence that statins reduce all-cause mortality and prevent cardiovascular events.

A large recent meta-analysis³ of randomised controlled trials did not find a statistically significant reduction in all-cause or cardiovascular mortality with intensive statin dosing (e.g. atorvastatin 80mg/day) compared to moderate (e.g. simvastatin 40mg/day) or low dosing (e.g. simvastatin 20mg/day). This finding is supported by the double blind randomised SEARCH trial.⁴

There is an important subgroup of patients - those with Acute Coronary Syndrome (STEMI, non-STEMI and unstable angina) where there is benefit to intensive versus moderate statin therapy. All-cause mortality is reduced and cardiovascular mortality is also reduced (NNT over one year 119).⁵ Atorvastatin 80mg would be the drug of choice here as simvastatin 80mg is not recommended for use in Lothian because of adverse effects.

Duration of intensive treatment should be discussed with each patient in terms of increased risk of adverse drug reaction and lack of evidence beyond two years.

For secondary prevention (including patients with diabetes) cholesterol level measurement remains a requirement of QOF. The NHS Lothian lipid guideline⁶ supports using the QOF audit standard target of a total cholesterol <5mmol/L.

Simvastatin 40mg remains the evidence-based and most cost effective statin for primary and secondary prevention of cardiovascular disease.

Key messages:

- Use simvastatin 40mg first line
- Consider simvastatin 20mg where intolerance of 40mg dose
- Review patients on atorvastatin 10mg and consider switch to simvastatin 40mg.

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Putting up resistance to antibiotic prescribing

***'Our mission is not to prescribe as few antibiotics as possible, but to identify that small group of patients who really need antibiotic treatment and to explain, reassure and educate the large group of patients who don't.'*¹**

The Scottish Antimicrobial Prescribing Group has presented their 2010-11 report of primary care antibiotic prescribing indicators by health board. Lothian demonstrates best-in-class practice by prescribing the least number of antibiotic courses per head of population in Scotland (see the chart). The challenge now is to maintain this and to reduce further the use of antibiotics where this is safe to do. This article summarises the key pieces of evidence to support this.

There is clear evidence that antibiotic use in primary and secondary care drives antibiotic resistance for the individual^{2,3} and for the population^{4,5}. Higher use is associated with higher levels of resistance.^{6,7} Eighty per cent of antimicrobial prescribing for patients in the UK is in primary care.⁸

There are many clinical areas in primary care where antibiotic use clearly benefits patients and outweighs the associated risks. Pyelonephritis, cellulitis, community acquired pneumonia, etc. are all

conditions that should *not* be targeted for reduced antibiotic use and indeed treatment needs to be of adequate dose and duration. However, 70% of primary care antibiotics are still used in managing self-limiting respiratory tract infections: acute sore throat, acute otitis media, acute rhinosinusitis and acute cough/acute bronchitis/acute chest infection.

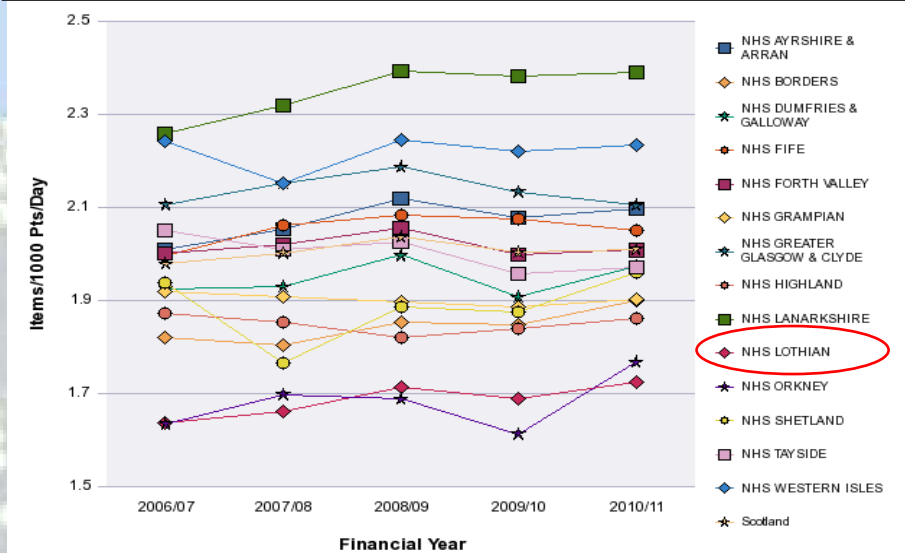
For the majority of patients with these conditions the benefit of using an antibiotic is so marginal that it is outweighed by the disadvantages to the individual and to society.

Overall for self-limiting respiratory tract infections the Number Needed to Treat (NNT) is 15, which is neatly balanced by a Number Needed to Harm (NNH) of 15.⁹ (This NNH does not include the harm caused by antimicrobial resistance.)

It might be useful to remind patients that we have not lost the capacity to heal from these infections regardless of whether they are caused by a virus or bacteria.

Over the forthcoming issues of the Lothian Prescribing Bulletin there will be a series of more focused articles looking at strategies to reduce antibiotic prescribing for self-limiting respiratory infections.

NHS Scotland use of antibacterials in primary care by NHS Board



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LJF combined oral contraceptives – prescribe by brand

Changes to the recommended combined oral contraceptives were agreed by the Formulary Committee following advice issued by the Scottish Medicines Consortium (SMC) on new formulations with a lower cost per treatment. Prescribing of these items will generate substantial cost savings, thus if they are recommended by Family Planning they are the preferred formulations.

Brand product from abbreviated SMC submission	Equivalent products	Generic name
Rigevidon[®] LJF first choice	Microgynon [®] 30 Ovranette [®] Levest [®]	ethinylestradiol 30 micrograms, levonorgestrel 150 micrograms
Gedarel[®] 30/150 LJF second choice	Marvelon [®]	ethinylestradiol 30 micrograms, desogestrel 150 micrograms
Gedarel [®] 20/150 Not preferred	Mercilon [®]	ethinylestradiol 20 micrograms, desogestrel 150 micrograms
Millinette[®] 30/75 LJF second choice	Femodene [®] Katya [®]	ethinylestradiol 30 micrograms, gestodene 75 micrograms
Millinette [®] 20/75 Not preferred	Femodette [®] Sunya [®]	ethinylestradiol 20 micrograms, gestodene 75 micrograms
Tri-Regol [®] Not preferred	Logynon [®] Trinordial [®]	ethinylestradiol micrograms / levonorgestrel micrograms triphasic: 30 / 50 (6 tabs); 40 / 75 (5 tabs); 30 / 125 (10 tabs)

Bisphosphonate osteonecrosis of the jaw (BONJ)

BONJ is an area of exposed or dead bone in the jaw lasting more than eight weeks in a patient who is, or has been, treated with a bisphosphonate but has not had radiation therapy to the jaw.¹ It is not certain why this problem only affects the jaw but it may be due to more extensive osteoclast suppression in the highly vascular alveolar bone of the jaw. The incidence is less than 1% of patients taking oral bisphosphonates² but higher for patients receiving intravenous bisphosphonate therapy. BONJ is not a permanent change but it can take several years for the lesions to heal once the bisphosphonate treatment has been stopped.

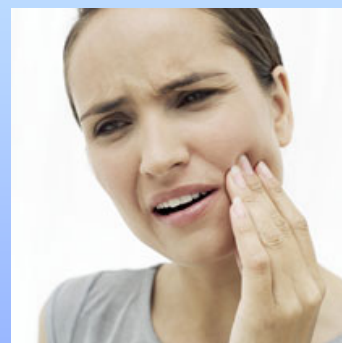
Dr Iain Jackson, Specialist in Oral Surgery, and his team have carried out a project on the communication between doctors and patients at the time of bisphosphonate prescription. As a result of this study, an advice sheet was sent to all GPs in Lothian to help deliver appropriate dental advice in relation to use of bisphosphonates at the time of prescription.

Symptoms of osteonecrosis of the jaw

- Pain and/or swelling of the gum, or gum infections
- Loosening of teeth
- Poor healing of the gums especially after dental work
- Numbness or a feeling of heaviness in the jaw.

Risk factors predisposing to BONJ are

- Bisphosphonate treatment for more than two years
- Intravenous bisphosphonate administration
- Higher potency drugs, e.g. zoledronate
- Increasing age
- History of dental disease.



Risk minimisation

- All patients with cancer should have a dental check-up before bisphosphonate treatment; other patients should have a dental examination only if they have poor dentition¹
- Patients should inform their dentist that they are taking a bisphosphonate
- During treatment with a bisphosphonate, patients should maintain good oral hygiene, have regular dental check-ups, and report any loose teeth, pain, or swelling of the gum.

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Be careful your morphine CAPSULE scripts don't 'morph'

Morphine sulphate modified release (m/r) capsules are available as two brands which are not interchangeable. For safety reasons Zomorph[®] should be prescribed every 12 hours and MXL[®] once daily. Please prescribe by brand name to ensure the correct dose is supplied. Additional care is required when prescribing and dispensing **morphine sulphate m/r capsule** preparations generically because the formulations are not interchangeable. This is particularly important when titrating doses.

Key messages:

- Consideration should be given to prescribing modified release morphine preparations by brand name to avoid confusion between once daily and twice daily preparations
- Careful consideration is needed when titrating doses to ensure the strength required is available in the appropriate form
- Patient medication records should be checked to ensure consistency of the brand supplied
- Prescriptions should be checked to ensure the 'dose' is appropriate for the 'brand' selected, for example once or twice daily.

The following table may be a useful reference:

Description	Brand – 12 hourly	Brand – once daily
morphine sulphate m/r 10mg caps	Zomorph [®]	
morphine sulphate m/r 30mg caps	Zomorph [®]	MXL [®]
morphine sulphate m/r 60mg caps	Zomorph [®]	MXL [®]
morphine sulphate m/r 90mg caps		MXL [®]
morphine sulphate m/r 100mg caps	Zomorph [®]	
morphine sulphate m/r 120mg caps		MXL [®]
morphine sulphate m/r 150mg caps		MXL [®]
morphine sulphate m/r 200mg caps	Zomorph [®]	MXL [®]

Thanks to Judie Gillies, Lead Pharmacist, Controlled Drugs Governance Team.

Supplement: Recent SMC and Lothian Formulary Committee Recommendations

Paper copies of the supplement to this issue have not been printed but are available at LJF website www.ljf.scot.nhs.uk in 'Prescribing Bulletins'. See also New Drug Decisions on the Formulary Committee section of the LJF website.

Supplement: LJF Calendar 2012 - enclosed

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