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Bones and other challenges

This month's issue of Australian Family Physician considers diseases of the skeleton of the body, but the issues raised are scaffolds for the challenges facing general practice, now and into the future.

The issues clinicians and health systems grapple with can be summarised in the microcosm of osteoporosis. There are lifestyle elements. There are changes in messages over time which can struggle to overcome out-dated but firmly held ideas. There is an increase in age related conditions with demographic changes. There is fact, there is fiction and there is much unknown. There are gaps when those with the greatest need for an intervention are missing out – for system, clinician or patient related reasons. There is the impact of personal experience on the weighing of information, risks and benefits.

Vitamin D: I have lost count of the number of conditions associated with it, the diseases it may be a risk factor for and the potential health benefits of supplementation. Vitamin D supplementation has been studied to see if it reduces the incidence of COPD exacerbations,¹ and if it prevents cancer² and cardiovascular disease.³ At this stage, there is a lack of evidence of effect for these causes, but also a need for higher quality studies to try and answer the questions with more certainty.

The good news is that in other areas there is more guidance to help us. A decade ago the 'sunsmart' mantra was the only message – with skin cancer, particularly melanoma, the disease to prevent. But over time there has been increasing recognition of the problems of moderate to severe vitamin D deficiency and osteoporosis. Finding a balance has taken time. In this issue of *AFP*, Wizenberg et al⁴ discuss vitamin D, including defining a deficiency, and provide specific recommendations about sun exposure and consider the current evidence around bone health in older adults.

Osteoporosis is under-recognised and undertreated. The article by Ewald⁵ focuses on prevention and detection, reminding us of differences in the evidence around bone density (a risk factor) and the evidence for fracture prevention (an outcome). And Bell et al's⁶ article considers the pharmacological management of osteoporosis, including the role of newer agents.

An area of clarity around what we should do is secondary prevention after the first fracture, but here reality is often not the ideal. In part it is systems issues, in part human. Even if osteoporosis is detected and treated, there are very high rates of discontinuation of treatment – two-thirds discontinue treatment within 12 months.⁶ While drug related side effects and dosing regimens might be addressed, I suggest there must be a more fundamental problem with the value our health system believes treatment offers and the value that the individual recipient believes it offers them.

Decision making and risk perception by humans is complex – while it starts with information, how we perceive that factually varies. While there are ways to improve the provision of information so that more people understand the underlying meaning, there are still issues around how to integrate that with your pre-existing knowledge, how it relates to your values and what you perceive as the benefits and risks to you. Add this to the real experience of having therapy and any accompanying side effects. This all contributes to one of the challenges of providing effective treatment options to patients with a benefit they value and convenience and side effects they find manageable and acceptable.

As well as areas of uncertainty, there are areas of progress. A recent study suggests that in older women who have a bone density scan with normal bone density or mild osteopenia, a screening interval of 15 years may be reasonable.⁷ Hopefully more research will answer the clinically relevant questions where there is uncertainty.

So for general practitioners and their patients,

what does this all mean? There are things we can make sure we look for, such as making sure our patient's low impact fracture is followed up in regards to osteoporosis – as that is something we know slips through the cracks. There are areas where we can be confident in our advice and there are other areas where we have to extrapolate information to suit our needs. There are also areas where what we know now may not be what we know in a decade. And there are conditions that for the patient are their highest priority, such as Paget disease, which Britton and Walsh⁸ provide an update on in this issue of *AFP*.

We hope you enjoy the articles in this issue of *AFP* and that they go some way to bridging the gap between the known and the unknown.

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References

1. Lehouck A, Mathieu C, Carremans C, et al. High doses of vitamin D to reduce exacerbations in chronic obstructive pulmonary disease: a randomized trial. *Ann Intern Med* 2012;156:105–14.
2. Chung M, Lee J, Terasawa T, Lau J, Trikalinos TA. Vitamin D with or without calcium supplementation for prevention of cancer and fractures: an updated meta-analysis for the U.S. Preventive Services Task Force. *Ann Intern Med* 2011;155:827–38.
3. McGreevy C, Williams D. New insights about vitamin D and cardiovascular disease: a narrative review. *Ann Intern Med* 2011;155:820–6.
4. Wizenberg T, van der Mei I, Mason RS, Nowson C, Jones G. Vitamin D and the musculoskeletal health of older adults. *Aust Fam Physician* 2012;41:92–9.
5. Ewald D. Osteoporosis – prevention and detection in general practice. *Aust Fam Physician* 2012;41:104–8.
6. Bell JS, Blacker N, Edwards S, et al. Osteoporosis – pharmacological prevention and management in older people. *Aust Fam Physician* 2012;41:110–8.
7. Gourlay ML, Fine JP, Preisser JS, et al. Bone-density testing interval and transition to osteoporosis in older women. *N Engl J Med* 2012;366:225–33.
8. Britton C, Walsh J. Paget disease of bone: an update. *Aust Fam Physician* 2012;41:100–3.

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