

## Real doctors treat more than one species

**C**ould physicians learn a valuable lesson from veterinarians? Veterinarians are aware that the same drug can have very different effects in different species. Could that approach be helpful for managing medications in frail older adults? Multiple criteria, algorithms, and frameworks have been established to coax physicians into reviewing medications and deprescribing where appropriate, but a recent study estimated that 20% to 65% of frail elders receive inappropriate medications.<sup>1</sup>

Frail older adults (*Homo fragilis*) have an increased fat-to-muscle ratio, causing a significant difference in drug distribution. Lipophilic drugs, such as benzodiazepines, have a much longer half-life and wider distribution in the body. Decreased plasma protein results in a much higher rate of unbound drug (such as NSAIDs) available to cause cardiovascular, renal, and gastrointestinal harm. Renal clearance declines, causing renal-excreted drugs and their metabolites to increase in concentration and cause harm, which is why codeine and morphine are not the best choices in this species. Many of the fragilis species will not live long enough to benefit from the multiple drugs they are taking for primary or secondary disease prevention.<sup>2</sup> Dangerous adverse effects from medications titrated to a target such as antidiabetic medications (hypoglycemia) and congestive heart failure (hypotension) may offset the gains from taking these medications.

How does one recognize this species? Some members are easy to spot because of their sarcopenia or mul-

tle chronic medical conditions, and some self-identify by an injurious fall. Although there are at least 27 frailty scales, gait speed and the get-up-and-go test are the simplest and perhaps best identifying feature.<sup>3</sup> A trained medical office assistant could likely spot these signs when they call a patient into the office from the waiting room. *H. fragilis* reside in large groups in residential care, but they are also found in the community under a variety of habitats.

What is different about the prescription of human medicine is that members of this species can express preferences and will be willing to discuss whether they wish to focus on length of life through all reasonable means or on quality of life with minimally intrusive treatment. The benefits of this discussion go both ways because members of this species respond very well to having their preferences consulted and being treated as individuals.

One other tip for working with *H. fragilis*: consider every new symptom in the context of the multiple medications they are taking<sup>4</sup> before adding any new drugs or pursuing complex investigations. Otherwise, it is possible to slip into a prescribing cascade where one drug's side effect causes another to be prescribed.

Another species, harder to recognize but also deserving of a different approach to therapy, is *Homo perfeci*. By identifying those who are in their final months or year of life, you may potentially reduce their suffering and that of their family. If this species is not recognized early, enormous amounts of medical resources are expended on medications and interventions that only serve to prolong the dying process. This species is best recognized by asking yourself, Would

I be surprised if this person died in the next 6 months to 1 year?<sup>5</sup> If the answer is no, then you have a species before you that is highly unlikely to live long enough to benefit from any of the primary and secondary prevention medications, so those should be stopped. Before you insist that it is not worth it to explain all of this to people who are already very sick, keep in mind a 2011 study that found two-thirds of the adverse drug events that resulted in emergency visits and hospitalizations were caused by just four medications: bleeding due to warfarin and antiplatelet drugs, and hypoglycemia due to insulin and sulfonylurea agents.<sup>6</sup> The priority for this species should be controlling symptoms and avoiding burdensome treatment. Many *H. perfeci* will be happy to take fewer medications and may even consider their quality of life to be improved just by having fewer medications to take each day.

While it can be hard to spot *H. perfeci*, and they can often overlap territory with *H. fragilis*, it is of benefit to recognize this species. Doing so allows *H. perfeci* the chance to plan for their end of life, complete their relationships, reduce burdens on their family, and prevent suffering. Having these conversations will allow this species the chance to live well until they die, which has beneficial effects on all other Homo species.

This superficial analogy is only intended to make you see your older adult patients in a different light and to enable better care.

For a list of the updated 2012 Beers Criteria for Potentially Inappropriate Medication Use in Older Adults go to [www.americangeriatrics.org/files/documents/beers/2012AGSBeersCriteriaCitations.pdf](http://www.americangeriatrics.org/files/documents/beers/2012AGSBeersCriteriaCitations.pdf).

The Palliative Care Benefits Pro-

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*This article is the opinion of the Council on Health Promotion and has not been peer reviewed by the BCMJ Editorial Board.*

gram application form now uses the Supportive and Palliative Care Indicators Tool to help you document the indicators of patient eligibility. Visit [www.spict.org.uk](http://www.spict.org.uk) for further information.

For information about iPal, a useful palliative care app that includes a tool to identify patients who would benefit from a palliative approach to care, symptom management, and communications tips, visit <http://ipalapp.com>.

—Romayne Gallagher, MD,  
CCFP(PC), FCFP  
Geriatrics and Palliative Care  
Committee

**References**

Available at [bcmj.org](http://bcmj.org).

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