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All doctors deal with obtaining prior authorizations for medically indicated tests, medications, and therapy. In some cases these are reasonable attempts to reduce costs. In most cases they feel like they are simply impediments to make a doctor think twice about whether the test or medication is worth the time and effort. Recently I gave up after spending 20 minutes attempting to make an appointment with the physician at the insurance company to request an MRI, not even to actually speak with the person. My secretary was not sympathetic. She does this all the time. Yesterday I wrote an appeal for a denial for a lift seat for an 83-year-old woman with advanced Parkinson’s disease. Evidently this wasn’t considered a “severe neuromuscular problem.” The goal is cost reduction by attrition rather than cost reduction through quality control. But a recent denial was different. It forced me to balance the needs of the one versus the many. I was integrally involved in the decision-making. It is a paradigm of what managed medical care should really mean.

My patient has tardive dyskinesia (TD), a medication-induced movement disorder. She had required the psychiatric medication that caused the problem. Her treatment had been exemplary. Her medications had been used sparingly and reduced when possible, leading to early recognition of her disorder, which, while not disabling in the sense that it restricted her movements, was disabling in the sense that she could not function well around other people due to her odd facial movements. There is no cure for TD. There is data suggesting that if she can remain off the medication that caused her TD, she has a 50-50 chance of recovering to normal or near normal, but this might take over a year. In the meantime, there’s a drug that might mask the movements, without making them worse in the long term. This approach would allow her to function normally while her TD, hopefully, resolves. She has a medical insurance plan for the indigent, and the drug of choice is very expensive. Since TD is not an approved indication for the drug, insurance plans are well within their rights to deny the prescription. In this case the issue was cost relative to demonstrated efficacy. Here’s where I was challenged: the insurer would agree to cover the drug, but the annual cost would equal the cost of insuring 20 people. While this would not affect the number of people covered during the current year, no one could predict whether such costs carried forward would mean a drop in the number of insured next year.

This is a difficult situation to be put into, but no different than the doctor at the other end of the telephone, an old friend, a thoughtful and fine physician, who was clearly torn between doing the best he could for his insured patient and doing the best he could for the poor, otherwise uninsured, of Rhode Island. This was a different interaction than the numerous calls to one of the big insurance companies or the companies they contract with to review the prior authorization requests.

I think that this case makes tangible what our usual interactions with the insurers do not. There is only so much in the pot. These are not cases where every dollar saved through a denial is money put into the pocket of an insurance company whose CEO makes several million dollars each year. I didn’t spend a lot of time listening to a recording telling me that the options have changed so I need to listen to 15 different new options before I proceed to the next step of listening to another 15 options. I called the medical director and he picked up the phone himself. I did not have to talk to someone who put me on hold to find out who my call was to be directed next.
Not only that, but we quite reasonably discussed the pros and cons of different approaches to treating the problem, and he even faxed me an article suggesting a different (and much less expensive) approach to treating the problem. Alas, that faxed article wasn’t useful, but the intention was the same as it was when we began our discussion. How can we balance the needs of the patient with the needs of the community? This is not a discussion we get into with other insurers. When we deal with the large, nameless companies we never perceive the tradeoff in services. The large insurers are not necessarily benign.

I have no complaint. As much as I do not like being involved in making these types of decisions, I prefer being a part of the decision-making process to being a faceless drone, appealing a denial, knowing that the particulars of the case may have no influence on the decision. And I recognize that colleagues working for the insurers are trying to make our insurance payments go further and the only way this can be done is through denials. There is, however, a difference between the clear balance required for my patient, and the random patient denied a lift seat because the guidelines evidently did not list her disease. If the hurdle is too low premiums rise, fewer government-insured patients get covered, and physician reimbursement rates go down. Or, the insurer makes more money and its stock market value increases. There is a different feel to the interaction when one concretely weighs this one patient vs. 20 unknown poor people who may pay the price next year.

We do have to get our priorities re-ordered. We have to understand what evidence does and doesn’t show, when and where costs become untenable. We need to protect treating physicians and nurses from lawsuits when they do consider cost cutting in decision-making. There is only so much in the pot. We are not doing a good job confronting this issue.

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A Tree-bark and its Pilgrimage through History

STANLEY M. ARONSON, MD
smamd@cox.net

The armies of Nebuchadnezzar II besieged the kingdom of Judah in 589 BCE and conquered Jerusalem three years later, exiling its resident Jews to the Mesopotamian plains of Babylon. And so the psalmist lamented (Psalm 137):

By the rivers of Babylon, there we sat down, yea, wept, When we remember Zion, We hanged our harps upon the willows in the midst thereof.

The trees of ancient Babylon, modern Iraq, were likely not willows (genus Salix) but rather the closely related poplars (Populus euphratica). But Carolus Linnaeus (1707-1778) named them, nevertheless, Salix babylonica to acknowledge this Scriptural reference. Linnaeus believed that willows with pendulous branches, the weeping willows, appear as though they are in mourning. But long before the exile of the Hebrews, willows had occupied a special place in the daily lives of ancient cultures.

Willow trees are nearly global in their distribution; and documents from ancient Egypt, Sumer, Assyria, Greece and China all indicate a familiarity with the sap derived from the tree bark. As a remedy it served two principal uses: it reduced fever (as a febrifuge) and it allayed aches and pains (as an anodyne). Nor was the medicinal use of willow bark confined to the cultures of the Eastern Hemisphere. Many Native American tribes had also been familiar with its salutary actions long before European colonists felt morally obliged to educate them in the ways of civilization.

Despite its widespread use as a folk remedy and despite the extensive writings of Hippocrates, it was not until the 18th Century that willow bark extract finally entered the formal repertory of prescribed medicinals.

Edward Stone (1702–1768), an Oxfordshire cleric and amateur scientist, was interested in the pharmacological qualities of tree bark. England, in the 18th Century, was still burdened by malaria; and quinine, the drug of choice for its treatment, was increasingly scarce since Spain controlled access to this substance obtained, then, from Peruvian cinchona tree bark. And so nibbling on tree bark – any tree bark – was a common occurrence in England. Rector Stone found the tree bark of Salix alba, the English willow, to be intensely bitter and since quinine was also bitter, he reasoned, willow bark might also share in quinine’s ability to suppress fevers.

Stone gathered a pound of willow bark and extracted a powdered residue which he tried on 50 of his church congregants. (A crude field test perhaps with neither control groups nor ethical considerations but still an earnest beginning.) He found his experimental medication “to
be a powerful astringent and very efficacious in curing agues and intermitting disorders.” And on April 25, 1763, he announced his discovery to the Royal Society in the form of a letter.

Other scientists found similar fever-allaying substances in meadow-sweet, a widely distributed, deciduous shrub of the Spiraea genus. It became apparent that this elusive chemical, first encountered in willow bark, was present in many botanical species, although its specific chemical structure had to await the labors of 19th Century German, Italian and French scientists who identified this bitter substance as salicylic acid [named after the willow tree genus, Salix].

Pure salicylic acid proved to be much too toxic as an oral medication but a variant of it, sodium salicylate, worked reasonably well. The 19th-Century discovery of coal tar as a source of dyes for textile factories created a vast new industry in Germany, employing many chemists seeking to exploit the many hidden chemicals within coal tar.

Two German industrialists, Friedrich Bayer and Friedrich Weskott, envisioned the commercial potential in marketing a salicylate-derived product for the alleviation of arthritis aches. One of their chemists, Felix Hoffman, then assessed the clinical merits of acetylsalicylic acid (ASA), a substance that had been synthesized by other chemists decades before but had not been explored clinically. The new trials were eminently successful and the Bayer Company then sought a distinctive commercial name for ASA. They fused the letter ‘a’ [from the word, acetyl], to ‘spir’ [from the genus name, Spiraea] and the chemical suffix, -in, to form the contrived name, aspirin. In the next century, it became the world’s most commonly employed medication.

Despite the discovery of alternate substances, aspirin continues to be guaranteed a place in the family medicine chest as a febrifuge, an anodyne and now as a prescribed anticoagulant. And the willow, once but an ornamental tree used occasionally to hang harps upon, has now made a major contribution to the comfort of humanity.

Author
Stanley M. Aronson, MD, is Editor emeritus of the Rhode Island Medical Journal and dean emeritus of the Warren Alpert Medical School of Brown University.

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