## Shift Happens: Complementary and Alternative Medicine for Rheumatologists



"If I tell you something three times, it's true."

Lewis Carroll

"...A rip-off of the public of \$2 million... They are screening garbage looking for diamonds... The real story is not that alternative medicine has turned the corner but that there was political meddling by insiders in Washington that created this because of their own naivete."

V. Herbert, MD, JD<sup>1</sup>

Complementary and alternative medicine, CAM. What to make of it and what to do with it? There has been a societal paradigm shift in attitude towards health and healing. Complementary and alternative medicine — called quackery only a few years ago — is now in vogue, acceptable, and trendy. Embraced by millions, supported by insurers, thriving among the hallowed hallways of the National Institutes of Health, and appearing in prestigious, scholarly publications<sup>1,2</sup>.

When I began my academic career a wise mentor counseled that an important element of success was to learn something well and develop facility to say it over and over again in different ways in print. I took his advice to heart. This is my 80th piece on some aspect of complementary and alternative medicine.

To explain how this came to pass, let me say that as a young academician CAM was the farthest topic from my mind; it was not something a serious scholar would even remotely consider. One afternoon in the late 1970s I received a call from my dean. A wealthy individual in his office was willing to donate to the university if we would study diet therapy for arthritis. Would I do it? But I was too busy in my laboratory finding the cause and cure for rheumatoid arthritis to waste time studying diet; besides, no respectable rheumatologist would want to be identified with such a study. A few years later my dean renewed the invitation. The person requesting the study was again in his office with a blank check and it would be very important for my

career to do this. By now the project piqued my intellectual curiosity. And so I came to study diet and learn about complementary and alternative medicine. However, my thoughts about CAM have evolved from ridicule<sup>3,4</sup>, to tolerance<sup>5</sup>, to genuine interest and optimism<sup>6,7</sup>, to skepticism<sup>8</sup>. Let me explain.

Why the popularity? CAM appeals in part to patients' frustrations. It is seductive to many with chronic disease, whose suffering is incompletely relieved, for whom therapies are inadequate, whose drugs are toxic and expensive, whose disease outcomes are unpredictable, and who consult harried physicians<sup>5</sup>. Others seek natural, healthy, holistic, empowering lifestyles<sup>9</sup>. And still other patients have psychosocial problems that lead them away from mainstream therapies<sup>10</sup>.

What is CAM? My simple definition: non-mainstream therapies<sup>11</sup>. More formally, CAM is considered a heterogeneous population of disparate practices and beliefs that vary substantially among traditions, that form no consistent body of knowledge, and that are alienated from a culture's dominant medical profession. The interested reader is referred elsewhere to an excellent exposition with a detailed taxonomy<sup>12</sup>. A related presentation offers a perspective of CAM today — the "paradigm shift" from antagonism to acknowledgment — as a consumer-driven reconfiguration of medical pluralism that has always existed in North America<sup>13</sup>.

What can rheumatology expect from CAM? I think there is *less* here than meets the eye. Indeed, it is of interest to note those presentations on CAM at the 2001 American College of Rheumatology Scientific Session (Table 1). They are of the order of magnitude of relatively rare, obscure disorders and do not begin to approach those on topical issues. I am unaware of clinically significant or "breakthrough" advances in rheumatology derived from CAM. [No, I do not consider glucosamine (or minocycline) in this category.] Nor do I see any on the horizon. I would speculate that herbal (botanical) products might offer some

See Randomized double blind trial of an extract from the pentacyclic alkaloid-chemotype of Uncaria tomentosa for the treatment of RA page 678 and Immunosuppressant effect of IDS 30, a stinging nettle leaf extract, on myeloid dendritic cells, page 659

Table 1. Abstract topics for 2001 ACR annual scientific session.

Торіс	No. of Abstracts on Program
Complementary/alternative medic	cine 14
Familial Mediterranium Fever	8
Amyloid	10
Stem cells	16
Kawasaki disease	20
Behçet's syndrome	28
GI safety	28

promise<sup>1,2</sup>. Indeed *The Journal* has featured encouraging studies of Trypterygium wilfordii Hook F<sup>14</sup> and, in this issue, a stinging nettle leaf extract<sup>15</sup> and an extract from the plant Uncaria tomentosa (cat's claw)<sup>16</sup> for experimental and human rheumatic diseases. It will be of interest to see how these evolve and what utility, if any, they will provide to our patients. Lest I be misunderstood, let me state the great respect I have for friends and colleagues, like Drs. David Eisenberg, Brian Berman, and Adam Perlman (at my institution) and others, who are dedicated to the rigorous, scientific study of CAM. Theirs is a worthy and needed effort. I may not share their optimism about the longterm clinical importance of those efforts, at least in rheumatology, but I wouldn't be disappointed to be proven wrong.

How should rheumatologists think about CAM? By balancing a mind open to new ideas with healthy skepticism: It was probably more serendipity than science that led us to gold, antimalarials, sulfasalazine, and other important antirheumatic therapies. Aspirin and colchicine came from botanicals (willow bark and meadow saffron, respectively). Who, years ago, would have imagined using antibiotics for ulcers? And today's conventions may be tomorrow's follies - remember tonsillectomies and adenoidectomies, or irradiation for ankylosing spondylitis?6. Consider novel hypotheses but hold them to the crucible of scientific inquiry, to the same standards demanded for any experimental question. Some mainstream therapies have not been scientifically validated (some - perhaps much - of what we do for low back pain, the iced saline lavages I administered as a resident for gastrointestinal bleeds, for example) and some non-mainstream therapies may be safe and effective (balneotherapy in our culture, for example). Ideally we should use what has been proven safe and effective, integrating this into our repertoire, and this is now considered "integrative medicine." There is only one kind of good medicine and it is derived from evidence-based science, whatever the source.

In summary, my own views of CAM:

- If it sounds too good to be true, it is.
- If you haven't read about it in the scientific literature, it's not established.
- If you first heard about it from the media, lay press, or your patients, it's not validated. There are no secrets in good

science or good medicine.

- There have been no "breakthrough," important advances in rheumatology from "complementary" and "alternative" medicine.
- The question regarding trying "complementary" and "alternative" therapies shouldn't be "why not?" but "why?"
- This is reality. Deal with it. Discuss "complementary" and "alternative" therapies with patients.
- I don't believe or not believe in "complementary" and "alternative" medicine. I believe in science, scientific methods, and a single high standard of good evidence-based medicine for all patients.

"A foreboding I have — maybe ill-placed — of an America in my children's generation, and my grandchildren's generation...when, clutching our crystals and religiously consulting our horoscopes, our critical faculties in steep decline, unable to distinguish what's true and what feels good, we slide, almost without noticing, into superstition and darkness... science requires an almost complete openness to all ideas. On the other hand, it requires the most rigorous and uncompromising skepticism."

Carl Sagan

"When I speak of science, I refer not to the work of a group of people with special training but to a habit of thought that refuses to accept any propositions about the natural world without objective and verifiable evidence."

Marcia Angell, MD

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