

First Prize the CORL award goes to...

Like all conscientious lead investigators, Halifax's Dr. Mark Glazebrook is quick to mention his colleagues and is modest to a fault: "I'm a cog in a big wheel. For the kind of numbers we need to prove what we're trying to prove, I couldn't do it alone, nor could Tim Daniels in Toronto, nor could Alastair Younger in Vancouver. We're very lucky to have a cohesive, collaborative group [*see sidebar*] that allows us to do this work."

By now, you've probably figured out that the "group effort" in question — which has just been recognized with the very first annual Canadian Orthopaedic Research Legacy (CORL) Award — has something to do with foot-and-ankle surgery, given that virtually the full roster of Canada's foot-and-ankle surgeons is involved.

Like much good science, the work is based on solid previous research, identifies a clear question of pivotal importance and will require the patience of Job to see it through to its conclusion, 15 to 20 years hence. "Three years ago," says Glazebrook, "we decided to make it a priority to answer the question, What's the best treatment for end-stage ankle arthritis —arthrodesis or arthroplasty?" Such was the researchers' zeal to explore the question that they launched their original prospective study without any funding, agreeing that if operating costs were to rise excessively for one reason or another each participant would pay his share based on the number of patients contributed to the study: "So we all put our wallets on the table and said, 'Let's get this study going, and we'll figure how to pay for it later.'" That entrepreneurial spirit has paid scientific dividends.

A first paper emerging from their ongoing three-year prospective study of 350–450 patients has been accepted for publication by the *Journal of Bone and Joint Surgery*, and it serves as a first attempt to contribute credible scientific findings on surgery for ankle arthritis to an area where, says Glazebrook, "there is no good literature. What we've shown is that people who have end-stage ankle arthritis experience the same loss of quality of life as people who have end-stage hip arthritis." Noting that the narrow focus by industry, government and the profession for hip-replacement surgery can result in lost opportunity for other surgeries, Glazebrook hopes that with this new published data "we can make the argument that research funds should be directed toward an operation that isn't proven, rather than one that works. There are studies that show hip replacement is the best surgery man has to offer. Every year, there are a half-dozen new hip implants issued, which can be perceived as continually re-inventing the wheel. Whereas this very fundamental question about ankle arthritis hasn't been answered."

Still, despite being in the shadows, there has been progress since the crude ankle prostheses of the 1970s and the calls for abandoning altogether the concept of ankle arthroplasty because of the high failure rate. Today, improved components and better sub-specialty care suggest that ankle arthroplasty is on its way to becoming a standard procedure sooner than later (at least in the US where there are as many foot-and-ankle specialists as there are orthopaedic surgeons in Canada). "We have 85% survival rates at

eight years,” says Glazebrook. “That’s the good news. The downside of the replacement is that it’s really unproven. If we only have 85% at eight years, that means at 10 years it might be only 50%. We feel ankle arthroplasty is a good operation, but we’re not sure how good.”

Which brings us back to the CORL Award. Glazebrook and his colleagues will use the funds to shift gears from their prospective study to a randomized clinical trial that will follow participants until they die or until their ankle needs to be revised. This summer, they will release an early report on two- and three-year follow-up data from their prospective study, which, according to Glazebrook, is “likely to suggest that there is no difference in outcomes between arthrodesis and arthroplasty. In the short-term, we know both procedures work well. It’s the long-term data where it gets exciting.” And of particular interest will be how reasonably active patients in their fifties who underwent ankle arthroplasty will fare 10, 15 and 20 years after the procedure. They will be the ones testing the limits of their prostheses, and their long-term revision rates will greatly influence, one way or another, the arthroplasty eligibility criteria for younger patients with end-stage ankle arthritis.

In the meantime, Glazebrook is undeniably pleased with the recognition that he and his research group have received: “This is a wonderful confirmation of what I want to do with my career and a validation of our collective gamble that the research we were pursuing was important. And it’s all the more meaningful because the funds are coming from my fellow surgeons. My special thanks go to Dr. Paul Wright, who is the driving force behind CORL. I think it’s a terrific achievement for him, as well.”

Post Script: The foot-and-ankle research group is definitely on a roll. Shortly after being notified about their CORL Award, their paper on loss of quality of life among end-stage ankle patients was voted best paper at the American Foot and Ankle Society’s annual meeting. Furthermore, the AFAS has also awarded them funding to pursue their research.

Post-Post Script: “I’m very pleased that Dr. Glazebrook has received funding for his important research and the recognition of his peers,” says Angelique Berg, executive director of the Canadian Orthopaedic Foundation. “But I must also say that I’m just delighted that my colleague and our current Chair, Dr. Paul Wright, has seen his vision through to realization. It was his idea to create a lasting legacy, endowed by Canada’s orthopaedic surgeons, that would complement our support program for orthopaedic research. This first research award confirms that his instincts were correct and that with a lot of good will and a little tenacity you can accomplish a great deal. There is no doubt that with the generous support of COA members this first research award will become an annual tradition.”

**COFAS Study Group
Clinical Outcome of the
Surgical Treatment of End-stage Ankle Arthritis**

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