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| Interview with Frank Rizer MD, Otologist, Warren, Ohio*Topic: Cochlear Implants*1/7/2002**AO/Beck:** Hi Dr. Rizer. Thanks for your time this morning. For those not familiar with you, would you please give me a brief overview of your professional education?**Rizer:** Sure Dr. Beck. Thanks for the invitation. I began my career at the University of Cincinnati Medical School. In that emergency room, the ENT residents taught medical students to care for minor lacerations and to do limited wound care. That exposure on my first day of medical school, was my first relationship with ENT. What’s more interesting is that of the seven suture docs, all seven of us went into ENT. I did my ENT training at Eastern Virginia in Norfolk and then went to House and worked with Fred Linthicum for a year studying the pathophysiology for Meniere’s syndrome. We worked on an experimental model, making guinea pigs dizzy and doing ABRs on them to test their hearing. We did a lot of guinea pig endolymphatic sac surgery and I learned about Meniere’s and related issues there. Then I did a clinical fellowship at House, during an amazing time (1984). What a wonderful education and a wealth of talented people! **AO/Beck:** And then from House you went right into clinical practice?**Rizer:** Yes. Early in January, 1986, I finished up my fellowship and left House and went to Warren, Ohio, which is where I practice today. The name of the practice is the Warren Otologic Group. I joined Drs. Lippy and Schuring 15 years ago because they wanted to develop a cochlear implant program. They already took care of stapes and chronic ears, but they were looking for someone to get involved with cochlear implants. It really was the perfect match of my interests and skills and their needs. They believed very strongly in the potential for cochlear implants and they recruited me to start a program. The county has about 250,000 people, so it’s not enormous, but we draw patients from both Pittsburgh and Cleveland. That gives us access to six million people within 75 miles.**AO/Beck:** How many neuro cases do you do in a year?**Rizer:** I probably do 15 to 20 acoustic neuromas and various other skull-base cases per year, and we probably do about 45 implants per year now. **AO/Beck:** Can you tell me a little from your perspective as a surgeon, has implant surgery changed over the last 15 years?**Rizer:** Yes, it really has. The surgery is much quicker, simpler and easier now. When we first started, we thought that we needed big exposures, and that’s what we created. Currently, we use much smaller incisions, and that of course, is quicker do to, heals faster, and the patients are less uncomfortable and are happier with the newer surgical techniques. **AO/Beck:** What about post-op hearing results?**Rizer:** The patients with the new devices do quite a bit better than the patients with the early devices. I think the biggest difference between the early implant days and the current status is the hearing result. Back in the early 1980s we told patients to expect to be able to get the rhythm of the sound and the loudness, that was about it. Now, the big expectation is that the patients all want to talk on the phone, and as you know from your clinical experience, many of them will be able to do it. It really is a day and night difference between the implant results in the early and mid 1980s, and what the patients are able to hear now. I would say that about 80 to 85 percent of my implant patients wind up using the phone. It really is amazing. In fact, some of the patients can use a cell phone. The important thing is that every patient is different, and even the same patient may have good phone results one day and then be unable to use a phone the next day, so there is variability not only across patients, but even in the same patients across time. **AO/Beck:** Of course cell phones and wireless phones also vary from moment to moment as the transmission and receiver issues are almost infinitely variable! What about the time lag between the surgery and the first tune-up with the device?**Rizer:** We explored that quite a bit to help identify the ideal time window. What we found was that although we could physically tune-up the implant after only a few weeks post-op, the problem was that the changes in the skin flap and swelling and other healing issues made us retune the implant again and again. So bottom line is, waiting 4 to 6 weeks allows us to tune them up right the first time, with only fine-tuning needed after that. So that’s what we recommend.**AO/Beck:** What about normal, face-to-face, person-to-person communications? How are your cochlear implant patients doing?**Rizer:** I feel very comfortable telling you the vast majority do very well. They can work one-on-one with others and communicate very effectively using their cochlear implants. Of course, the biggest negative issue is noisy environments. All patients do poorly in noise, and the more noise there is, the worse they do. This is the same situation that hearing aid patients encounter. Some early work with newer signal processing strategies suggests that we will be able to do better with implants in these situations. That reminds me of a patient I saw a few weeks back who was complaining that he couldn’t do well at work, and when I asked him to remind me what his occupation was, he told me he’s a bartender. There’s not much we’re going be able to do to quiet the bar down, but of course the audiologist reviewed multiple listening strategies and got him refocused on reasonable expectations relating to communication in noise! **AO/Beck:** What are your thoughts on cochlear implants and children?**Rizer:** My thought is very similar to the vast majority of otologic surgeons and audiologists that I’ve communicated with on this topic. We still identify fewer young children than we should, and we still identify them later than we should. I believe we have the tools and the talent, and we should identify and intervene earlier and more aggressively, assuming that’s what the family wants to do. That is, our job is to identify the patients and review with the families their options as soon as possible, because we know the children identified and treated earlier will do much better in the long run.**AO/Beck:** What about bilateral implants? Your thoughts please?**Rizer:** I was a surgeon for the bilateral implant study, so I have a few thoughts there too. I had a 46 year old female patient who had been deaf for ten years, and we implanted both ears as part of the study. The total operating time was about three hours and we did both ears in that time period. She did great as soon as she was tuned-up. She reports that she has a full, high fidelity sound and that when she wears only one unit, there is a clear degradation of sound, which makes perfect sense to me, and, I think to any of us involved with hearing sciences. In fact, we have three other patients we are currently evaluating for bilateral cochlear implantation.**AO/Beck:** I believe the FDA status on bilateral cochlear implants is investigational? **Rizer:** Yes, that’s my understanding too. **AO/Beck:** Certainly a big issue in this discussion is going to be cost. Cochlear implants are not cheap!**Rizer:** Yes, no doubt about that. Cost is, and will probably continue to be an enormous issue. Additionally, the cost of the post-op tune-up services is expensive and cochlear implant aural rehab expenses are not very well reimbursed, if that gets worse in the near future, it could impact all cochlear implant patients. Nonetheless, if we remove cost from the equation, seems to me it’s a slam dunk. Patients with bilateral implants can probably expect very good localization, better sound quality, better word recognition, getting rid of the blind side and on and on. The benefits are enormous, but again, so too, is the cost. **AO/Beck:** What about patients with a profound deafness in one ear and a moderate-to-severe loss in the other ear? Have you implanted any of those?**Rizer:** No, I haven’t but I think it makes sense and I’d like to see that explored. Even though that patient may benefit from a hearing aid on the better side, think about how they’ll do when they get a simple external otitis in the better ear, or how they’ll do if the hearing aid goes out for repair. I really think that’s an area ripe for exploration. Another advantage to implanting those individuals is that they can learn what the implant sounds like and compare it to the hearing aid ear. That may help them quite a bit in transition from hearing aids to implants and it may decrease the aural rehab time and expense. **AO/Beck:** Yes I agree, I think it has merit, particularly in patients who are at risk for losing more hearing in the better ear. I recall back in the mid-1980s when I was at House, we had at least three patients who wore a hearing aid on one side and an implant on the other side. It really was useful to the patients as far as getting sound from both sides, and obviously it provided a back-up’ system too. I can certainly recall the patients in our studies preferring to wear both the implant and the hearing aid in tandem.**Rizer:** Sure, again, it makes a lot of sense. There’s not much new there, certainly hearing from both sides is clearly advantageous on many levels. **AO/Beck:** Can patients contact you at the Warren Otologic Group if they have questions or concerns on this topic?**Rizer:** Sure Dr. Beck. They can send me an email and I’ll do my best to respond to each of them as I am able. The email address is implant@lippygroup.com and the webpage is [www.lippygroup.com](http://www.lippygroup.com).**AO/Beck:** Thanks again Dr. Rizer. **Rizer:** Thank you too. It was my pleasure.**Rizer:** The patients with the new devices do quite a bit better than the patients with the early devices. I think the biggest difference between the early implant days and the current status is the hearing result. 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