Physician of the Month

Dr. Reza Jahan

By D. Ric McGill Business Development -Radiology

Ric: Did you always know you wanted to be a physician?

Dr. Jahan: I always had an interest in science and always had an aptitude for science. I wanted to do something with my life where I felt like I would make a difference. Being a physician was the perfect opportunity to not only pursue my interest in science, but to satisfy my intellectual curiosity and also to have a job/position/opportunity that would contribute to making a difference – something that I felt was important.

Ric: Do you come from a medical background? Were your parents physicians?

Dr. Jahan: No, my father was an engineer and my mother was a homemaker. We did have a lot of family members around that were physicians, and they definitely had an influence on me choosing to be a physician. I saw how well respected they were, the importance of their work and how much of a difference they made in people's lives.

Ric: Rumor has it that you're a "True Blue Bruin".

Dr. Jahan: I did my undergrad here majoring in Biochemistry then I went to medical school here. My internship was in internal medicine then radiology. My fellowship was in interventional radiology. I finished my training in 1999, joined the faulty and have been on faculty of the Division of IR since.

Ric: Did you always know you were going to go into neurointerventional radiology or was there an 'ah-ha!' moment where it all of a sudden clicked and you knew this was your path?

Dr. Jahan: Not at all. When I started in radiology, I was actually working with Larry Bassett in mammography. I published several articles with Larry, and we actually wrote two books together – one was a textbook in mammography and another was a teaching atlas of mammography.



My intention was to go into mammography but during my residency, I saw the work that Guido Guglielmei and Fernando Vinuela were doing in interventional neuro radiology. At that time, the coils were just being developed for brain aneurysm treatment. I found that more fascinating and that really shifted my direction from mammography to neuro radiology and neuro IR. I pursued that instead of mammography towards the end of my residency.

Ric: You recently had some great success with the SWIFT PRIME study. Can you tell us a little about what's going on with that project?

Dr. Jahan: The history of that study goes back many years, from when I first started working to test the device for stroke treatment. I did the preclinical studies for the SOLITAIRE device to evaluate it in its ability to efficiently grab a blood clot and pull it out of the brain blood vessels. The preclinical studies were successful in that the device worked at least* as well as the MERCI device, which was the only thrombectomy device that was approved at the time for removal of blood clots from brain arteries. The preclinical studies' success led to a head to head trial of the SOLITAIRE device vs the MERCI device. I was the neurointerventional investigator of that study called SWIFT. Dr. Jeffrey Saver, my colleague, was the neurological principle investigator of that study.

The SWIFT study was successful. The SOLITAIRE device was better at successfully removing blood clots from the brain arteries with fewer complications and fewer bleeds. The success of the SWIFT study then led to the next trial to prove that the device actually improves patient outcomes. Not only is it more efficient than the MERCI at removing blood clots but now we had to test it against the best medical treatment that was FDA approved to show that the device actually improves outcomes.

Ric: What did you find with your data? Were people actually having greater outcomes than you expected?

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Dr. Jahan: Yes, that study was the SWIFT PRIME study that the SOLITAIRE device was very successful in removing blood clots from these patients that were having severe strokes. The patients we chose for the study were those with the most severe strokes that had large blood vessel blockages in the brain arteries. These are patients that don't do well with the clot busting drug, IV tPA which is the only available FDA approved medication for stroke patients. The clot busting drug was able to open up about 30-35% of the clogged arteries in the cohort of patients that we tested in the study. This is by historical data. With a large blood vessel blockage the tPA is not very efficient at opening up the clogged artery. It's better at the smaller blood vessels in the brain - it does okay with that. But with the larger blood vessels of the brain, the clot burden is much larger and the ability of the drug to dissolve the clot is not as great in that situation. This is where the clot busting drug is inadequate and the addition was beneficial. The device was able to open up the clogged arteries in 88% of the patients in the SWIFT PRIME study. This compares again to the historical 30-35% with the clot busting drug alone. That very high rate of success in reopening the clogged arteries led to an improvement in outcomes in the patients that were treated with the device at 3 months. At 90 days, 60% of patients that had the clot removed with the clot removing device had recovered to the point where they were independent and able to take care of themselves at home, without any assistance. This compares to 35% of the patients that received the clot busting drug - a significant improvement in the outcomes of the patients that received the clot removing device.

Ric: So many big gains have been made so fast. Where do you see this going in the next 5-10 years?

Dr. Jahan: Now that we have shown the benefit of the clot removing device through improving outcomes, this will be considered the standard therapy for patients with severe strokes. What we would anticipate to see is that the hospitals that receive these patients will forge hospitals (like us) that have the ability to do these complicated procedures. Upon arriving at a community hospital, they will be able to administer the clot busting drug and then immediately transfer the patient to larger hospitals (like us) that are comprehensive stroke centers to take the patient to the procedure room and remove the blood clot with the device.

Dr. Reza Jahan

Ric: You've shared so much about what you do and how you got to this point. How about a few quick questions about you?

Dr. Jahan: (laughing) OK...let's go!

Ric: What was the first job you ever had?

Dr. Jahan: When I was in high school, I worked in a movie theater.

Ric: Morning or Evening person?

Dr. Jahan: When I was younger, I was more of an evening person. As I get older, I'm more of a morning person.

Ric: I know you're quite the "foodie". What is your favorite restaurant in LA?

Dr. Jahan: I would say Drago Centro in Downtown Los Angeles.

Ric: Best way to spend the day off?

Dr. Jahan: I would say Malibu – relaxing at the Malibu Country Mart while sipping my coffee.

Ric: Favorite City?

Dr. Jahan: New York.

Ric: Who has inspired you most?

Dr. Jahan: My biochemistry professor in undergraduate

Dr. Donald Adkinson.

Ric: Where city did you grow up?

Dr. Jahan: Essentially LA since I was 13. Before that we

lived in Iran.

Ric: What is the oddest phone number you have in your cell phone right pow?

cell phone right now?

Dr. Jahan: The direct phone number to Club 33 at

Disneyland.

Ric: What song is currently stuck in your head?

Dr. Jahan: (Laughing...) I listen to a lot of Classical.

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Ric: Dr. Jahan, thank you so much for your time and sharing the great information about the SWIFT PRIME study.

Dr. Jahan spends most of his time at the Westwood Campus in the Ronald Reagan Medical Center and can occasionally be found on weekends sipping coffee in Malibu with

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friends. \square

Dr. Reza Jahan

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