PAKISTAN JOURNAL OF Cardiovascular Intervention

OPEN ACCESS

PERSONAL NARRATIVE

A Page from the Development of Modern Cardiology in Pakistan

Azhar Masood A Faruqui, H.I., S.I.
Ex- Executive Director, National Institute of Cardiovascular Diseases

The story of my involvement in the development of Interventional Cardiology goes like this:-

Citation:
Faruqui. A Page from the Development of Modern Cardiology in Pakistan. Pak. j. Cardio vas. int. 2021; 1(1): 01-03.

Corresponding Author Email:
amafaruqui@hotmail.com

DOI: 10.58889/PJCVI.1.1.3

Funding:
No funding received.

Conflicts of Interests:
The authors have declared that no competing interests exist.

Received 27/09/2021
Accepted 18/11/2021
First Published 01/12/2021

I did my training in Internal Medicine and then Cardiology at the Emory University School of Medicine in Atlanta, Georgia, USA. After completing my training, I wanted to get a taste of British medicine, so I accepted the offer of Prof. John Goodwin, the famous British cardiologist, and joined him as a Tutor in Cardiology at the Royal Postgraduate Medical School at Hammersmith Hospital in London, UK.

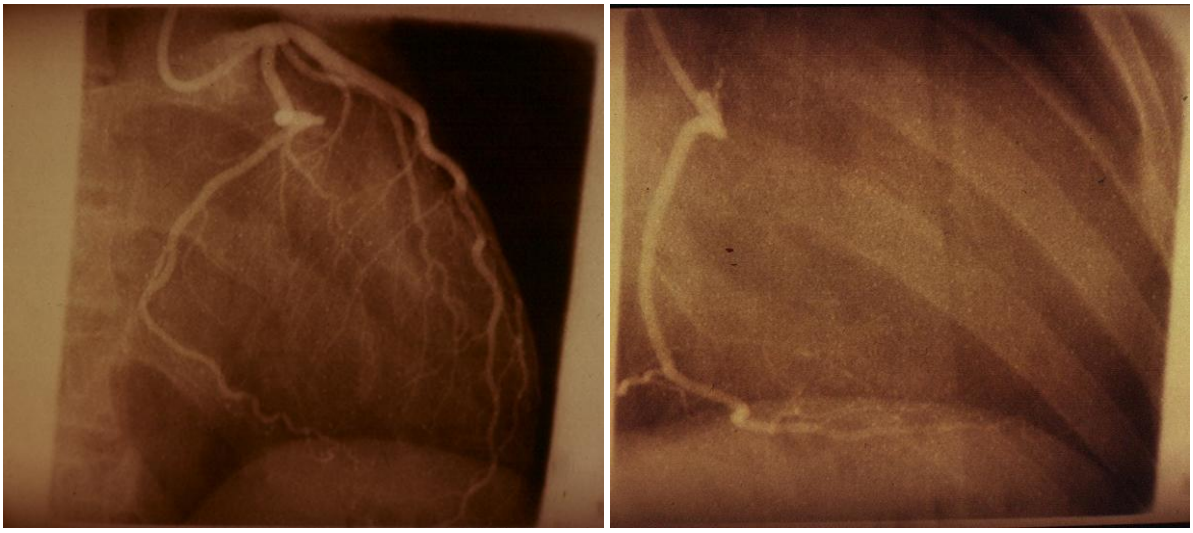
Before I left for London, I signed a contract with Dr. J. Willis Hurst to return to Atlanta, USA, in December 1976 and join the faculty at Emory University School of Medicine as Assistant Professor of Medicine (Cardiology) and Director of the Cardiac Catheterization Laboratory. After my stint in London and then my teaching job in the USA, I returned to Pakistan and joined the NICVD Karachi in January 1978.

When I returned to Pakistan, I brought as personal baggage the first M-mode Echo machine in Pakistan (2-D Echo was not invented). At that time, Right Heart catheterization was being done routinely in Pakistan and at the NICVD, and however, selective coronary angiography was not being done routinely in Pakistan[1].

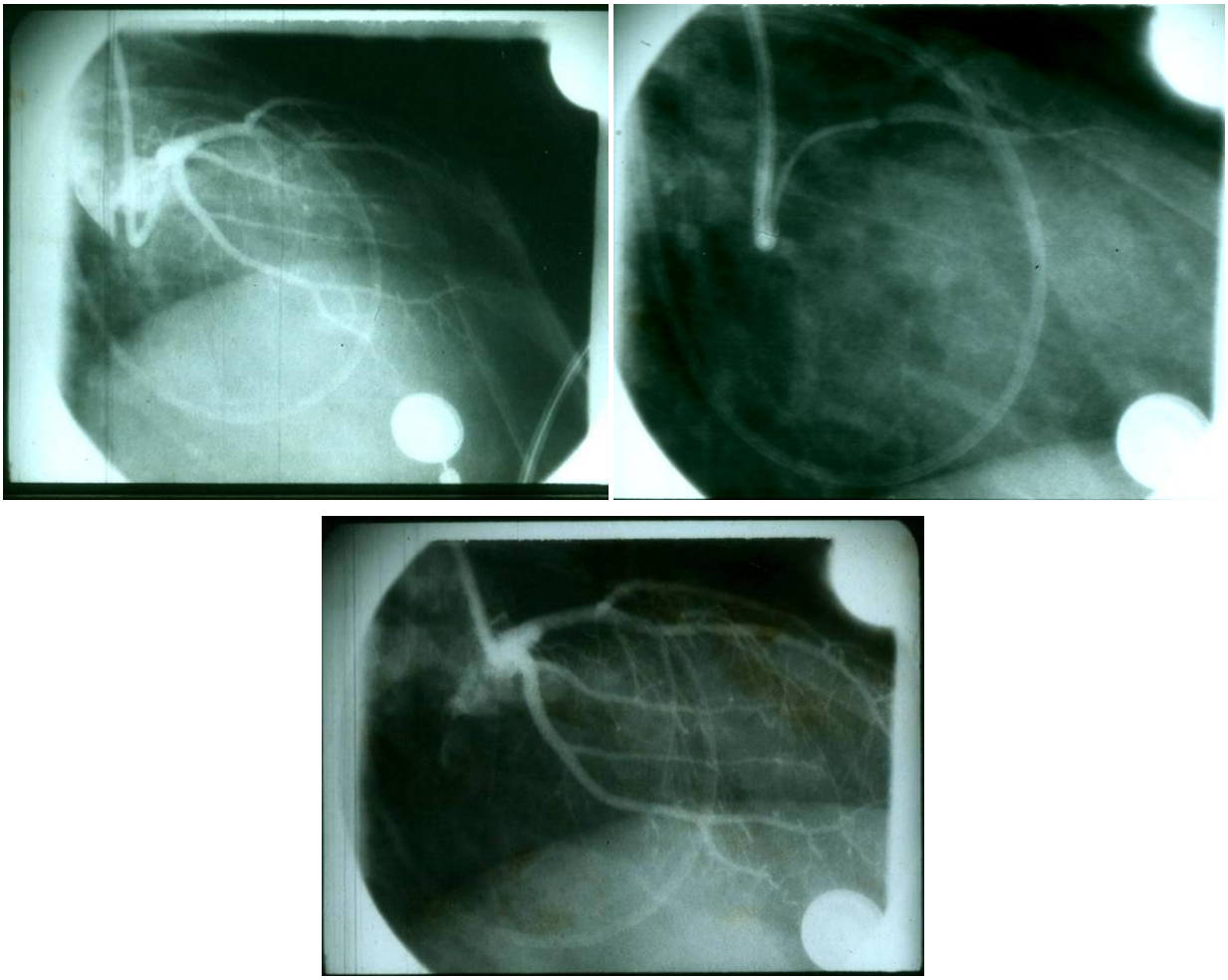
Most cases needing coronary angiography were sent to the UK at that time. The first case of Coronary Angiography I performed was a young airline Pilot from an African country (probably Nigeria) who had come to Karachi for training with PIA. He had some chest pains, and his ECG showed deep T wave inversions in his chest leads[2]. A board was set up at NICVD to recommend that he be sent to the UK for it. I suggested to the then ED NICVD, Prof. Shaukat Ali Syed, let me do it here at NICVD Karachi. He was somewhat hesitant and said we had attempted it before at NICVD but with poor results! I told him not to fear as I was fully trained and routinely did it in the USA. He agreed, and I performed my first selective coronary angiography at NICVD.

As it turned out, the young man's coronaries were perfectly normal! He was a case of such precordial T wave changes we know commonly occur in young, muscular men of African descent. There was no looking back after that, and many operators began doing it on a routine basis all over Pakistan.

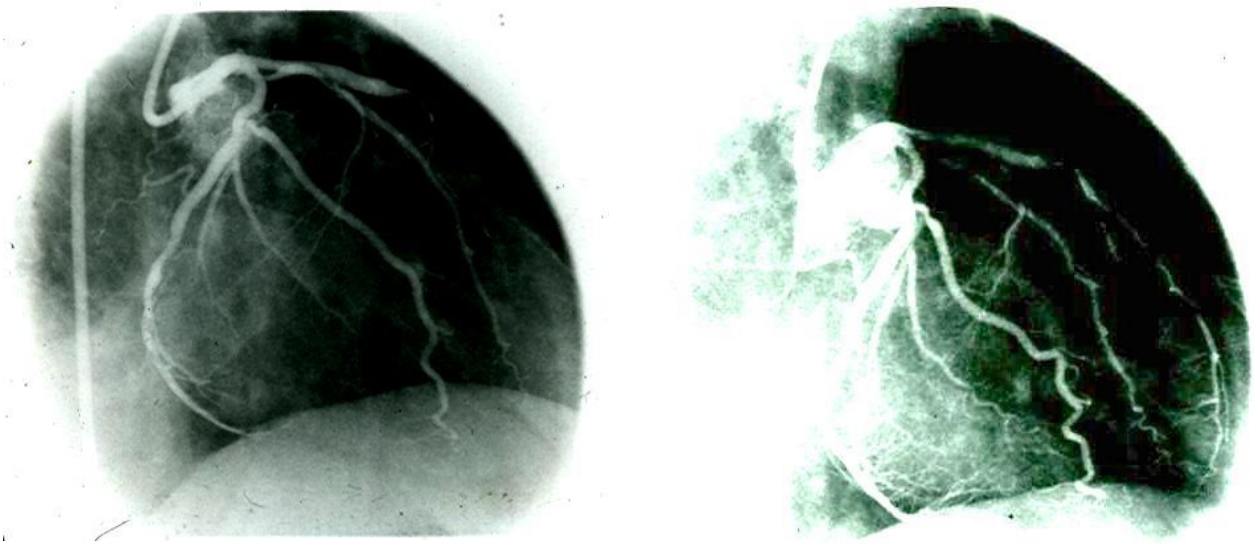
Published by Pakistan Society of Interventional Cardiology



First Coronary Angio, Year 1978



First PTCA (POBA), Year 1981



First I.C. Thrombolysis, Year 1982

In 1977 I was at the AHA meeting in the USA when a young physician named Andreas Gruentzig presented his paper showing a technique he named Transluminal Coronary Balloon Angioplasty to the American audience. All of us attending the meeting were dumbfounded! We were listening with excitement but were not fully aware that we were seeing cardiology history being made! After the meeting, most of the audience was skeptical of the success of such a "gross" procedure! It was bound to fail, the Pundits there predicted!

This young German physician, working in Zurich, Switzerland, had created history, and, as we know now, there was no looking back. In 1980, Dr. Gruentzig moved to the USA to the center where I had trained and worked on the faculty. I wrote to my former boss Dr. J. Willis Hurst, in 1980 that I wanted to come for a couple of months and learn the PTCA technique from Dr. Gruentzig himself and attend his teaching course. The following year I went to Atlanta for two months and scrubbed with Dr. Gruentzig and learned the technique from the master himself.

On my return, we ordered the equipment, only made by Schneider, and, at that time very bulky, and crude by today's standards. The arterial cannula was size 13 F, the guide catheter was a size 11 F, and the balloon catheter shaft was size 9 F. On entry into the coronary ostium, the pressure would be damped entirely in many of our smaller size coronary arteries in our population. So, in such cases, we would have to be very quick. Then, the prototype system was not steerable and would go wherever the blood flow would take it. So, my first case here in Pakistan at the NICVD was a partial failure, as the main stenosis was in LAD. However, the balloon kept going into a large Diagonal[1], which also had stenosis, which I dilated, but failed to dilate the LAD stenosis in this my first case here! The following week, the Lad lesion was dilated, but the excitement had abated[1&4].

After three years, when I had done the first 100 cases, I presented the results to the Annual JPMC Symposium, and the paper was published in the Proceedings of the JPMC Symposium. It is now over 38 years since we did the first PTCA in Pakistan at the NICVD Karachi[3].

Most young Cardiologist may not know that coronary thrombolysis was started as intracoronary thrombolysis as an emergency procedure and only later was intravenous coronary thrombolysis became a routine procedure. I performed our first intracoronary thrombolysis in a patient suffering a myocardial infarction while waiting in the Cath lab in 1982 (see angiograms).

There is no looking back at the rapid development of the techniques, hardware, and the spread of the number of centers, and the number of trained operators we have in Pakistan presently. In today's world, the new technology takes hours, not even days, to reach all corners of the world. Pakistan was the first country in Asia to start PTCA and remains at the cutting edge of this technology. I am so proud of our young talent and our institutions.

References

1. Faruqui A, Ahmad IS. First Year of Echocardiography in Pakistan. Pakistan Heart Journal. 2012 May 11;12(1-2).
2. Faruqui, Azhar M. A. Acute Myocardial Infarction Pattern with Normal Coronary Arteries. Proceedings of 17th Annual Medical Symposium JPMC Karachi, March 1980.
3. Faruqui, Azhar M. A. Balloon Angioplasty; Experience of first 100 cases at the NICVD Karachi. Proceedings of the Biennial Convention of Pakistan Society of Physicians, March 13-14, 1987.
4. Faruqui AMA; Heart Disease in South Asia. Experience in Pakistan.In Heart diseases and Geography. Clinical essays, 1983. Vol 1. Ed. JW Hurst Part IV Mc graw Hil Book Co. USA.

Disclaimer

It is personal point of view written in best of Professional knowledge and experience.