

Post-vaccination CABG graft thrombosis: Should the Anaesthesiologist be worried?

Rupinder Kaur Kaiche

Ashoka Medicovert Hospital, India

Background

Graft patency of venous conduit is 40-50% at 10 years, radial artery is 88-92%. Covid vaccination has caused graft thrombosis in two patients within six months of surgery.

We analysed possible cause, consequences and relevance for anaesthesiologist.

	Age sex	Surgery	Graft details	LVEF	Creatinine clearance	Euro-score	Complications	BSA	Intra op-findings	Vaccination Date
1	49-M	Off pump CABG on 22/04/21	LI-MA-LAD,LT RADIAL(AORTA) OM1	60	92	0.97	Nil	1.89	CRITICAL LMCA WITH NORMAL LAD,LCC & RCA, GOOD LV,MILD LVH,ACS,UA,RWMA,LVEF-60	10/07/21 Angina on 12/07/21
2	71-F	Off pump CABG on 05/02/21	LIMA-LAD,SVG-D1,SVG-OM1	55	66	2.21	Nil	1.58	CRITICAL TVD,USA,ACS, RWMA,GOOD LV,MILD LVH,RCA CTO 100% NON DOMINANT,PDA NOT SEEN,HENCE NOT GRAFTED.	20/07/21 Angina on 21/07/21

Methods

	Age Sex	Surgical Detail	DOS	Graft Details	Check CAG date	Result	Duration In years
1	68-M	CABG x2	18/02/13	LIMA-LAD, Aorta-SVG-D ₁	26/12/18	All graphs patent	5
2	62-F	CABG x3	30/10/10	LIMA-LAD,Aorta-SVG- Ramus-OM.Sequential.	24/08/15	All graphs patent	5
3	55-M	CABG x2	28/03/13	LIMA-LAD-Y-Radial-PLVB	01/12/20	All graphs patent	7
4	72-M	CABG x3	01/03/10	LIMA-LAD-Y-Radial-OM-PDA sequential	05/02/21	All graphs patent	11
5	56-M	CABG x2	10/12/10	LIMA-LAD, Aorta-Radial-OM	28/06/19	All graphs patent	9

The surgeon, anaesthesiologist and team had standardised protocols since 15 years.

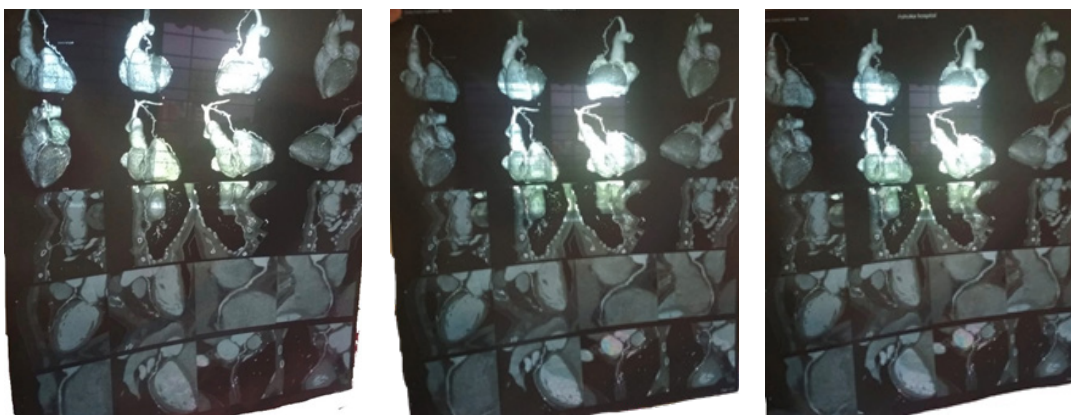
Table 1- Showing data of patients with angina post-vaccination.

Table 2-Showing graft patency study of operated patients.

Check angiography was done in one patient while other did not consent.

Picture 1 CT angiogram showing - Patent LIMA → LAD Graft

Complete Thrombotic occlusion of aorta → radial graft → OM



Biography

Rupinder Kaur Kaiche is a cardiac anaesthesiologist and intensivist based in Nashik, India. She has anaesthetized more than 5000 cardiac surgery patients, many of them high risk with ejection fraction of less than 20%. She has also managed chronic renal failure patients for CABG followed by renal transplant, apart from CABGs on and off-pump, valve surgeries, valve + CABG, congenital defects, unstable ventilated patients for angioplasty and high risk cardiac patients for non-cardiac surgery. Having graduated from Medical School from Mumbai, she pursued Anaesthesiology and Critical Care for her post-graduation. She was in UK for a few years for international experience. She has many national and international research publications to her credit. She is currently working on a concise anaesthesia booklet for quick view. Apart from medical research, she has also published 3 books of poetry which has got International recognition. She has also released a poetical music audiobook.

rrkaur8@gmail.com