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A RARE CASE OF STENT EMBOLIZATION DISLODGEMENT INTO CORONARY ARTERY FOLLOWED BY STENT CRUSHING

Cardiology

Kalyan Munde Associate professor, Department of Cardiology, Grant Medical College & JJ Hospital, Mumbai.

Rohit Rai* Senior Resident, Department of Cardiology, Grant Medical College & JJ Hospital, Mumbai. *Corresponding Author

Shakil Shaikh Assistant professor, Department of Cardiology, Grant Medical College & JJ Hospital, Mumbai.

Aditya Gupta Senior Resident, Department of Cardiology, Grant Medical College & JJ Hospital, Mumbai.

ABSTRACT

Stent dislodgement is a rare complication of PTCA procedure. Embolism of the stent can have catastrophic results. Retrieval of stents can be possible with use of snares however if the stent is in the coronary artery direct stent crushing with another stent can be done in order to prevent coronary artery thrombosis. In our case since stent dislodged into the coronary artery where we had planned for stenting, stent crushing with another stent was done.

KEYWORDS

PTCA, Stent Dislodgement, Stent Crushing

INTRODUCTION

Drug eluting stents are currently used to prevent stent restenosis. A rare complication can be stent dislodgement. Embolisation of stent can be a rare but hazardous complication for the patient. Various non surgical methods are there to retrieve dislodged stents[1]. Methods include wire braiding, distal small balloon retrieval technique, snare use, forceps in large vessels and stent crush technique[2,3,4,5].If the stent can be crushed it can be done with another stent.[3]Snare can also be used to retrieve the dislodged stent[4]. In rare cases forceps can be used especially for deformed stents[5]

CASE REPORT

A 43-year-old female presented with unstable angina. She is a known diabetic with a old history of chronic stable angina followed by coronary angiography 1 year back suggestive of distal left main 70% stenosis, LAD proximal 80% tubular stenosis from ostium, LCX 80% discrete ostial stenosis, Ramus 70% discrete stenosis, RCA PDA 80% discrete stenosis and PTCA to LCX 3.5 x 28 mm DES, Distal LM proximal LAD 3.5 x 38 mm DES and distal RCA 3 x 44 mm DES were done. Eight months later on reappearance of symptoms coronary angiography revealed LM 30-40% ostial stenosis followed by distal 80% LMCA ISR, LAD 80% ostial ISR, mid 30% - 40% plaque f/b minor plaque, D1 70% ostial stenosis LCX 90% ostial ISR, RCA proximal 70% long segment stenosis mid 70% plaque distal minor plaque PDA stent in situ with 50% ISR PLV 70% ostial stenosis.

Patient was taken for PTCA and PTCA wire used to cross lesion in LAD and LCX. Lesion predilated with PTCA Balloon. When lesion was being stented premounted Drug eluting stent got dislodged and went into aortic cusp(figure 1) and then went into the left main(figure 2) and LAD. Another Drug eluting stent was taken and inflated in LM LAD and the dislodged stent was crushed. On check shoot there was no evidence of flap or dissection(figure 3). Patient remained stable post procedure shifted to ICCU

CONCLUSIONS

Stent dislodgement is a rare complication and can range from 0.3% to 8% and has significantly decreased due to recent advances in stent mounting[1]. Various factors leading to stent dislodgement including extreme angulation, previously deployed stent, highly calcified coronaries, inadequate predilation and direct stenting[2]. In our case previous stent may be a cause. Snare can be used to retrieve foreign bodies including dislodged stent and has shown good results[6]. In our case the dislodged stent was in the left main and LAD and another stent was planned at the same site so direct stent crushing with the second stent was done. Check shoot showed TIMI III flow and good result. Stent dislodgement can be potentially fatal if acute thrombosis develops in coronary artery or can lead to stroke if it embolises to brain. Adequate predilation before stent deployment and retrieval of stent delivery system if resistance is felt during progression can be used to prevent further episodes.

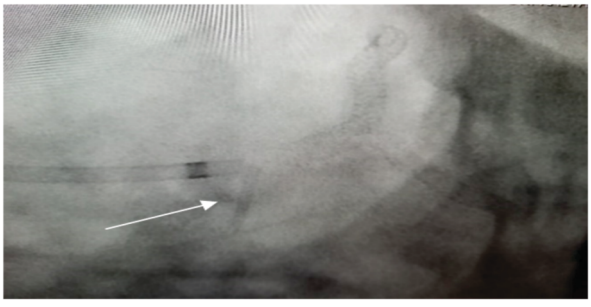

Figure 1: Dislodged stent in aortic cusp as shown by arrow

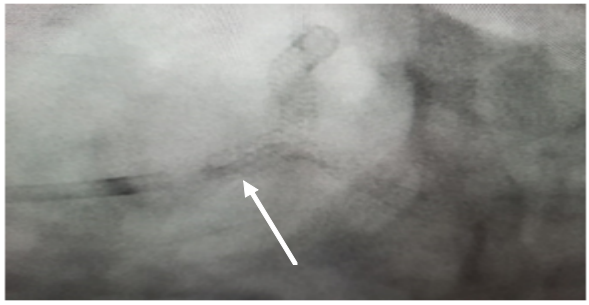

Figure 2: Dislodged stent in Left Main coronary artery as shown by arrow

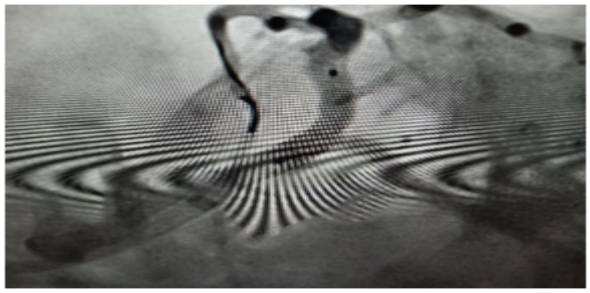

Figure 3:Post stent deployment and crushing shoot suggestive of TIMI III flow

REFERENCES:

1. Eggebrecht, Holger, et al. "Nonsurgical retrieval of embolized coronary stents."

Catheterization and cardiovascular interventions 51.4 (2000): 432-440.
2. Nikolsky, Evgenia, et al. "Stent deployment failure: Reasons, implications, and short and long term outcomes." *Catheterization and cardiovascular interventions* 59.3 (2003): 324-328.
3. Hussain F, Moussa T. Migration of an embolized deployed stent from the left main with subsequent crushing: a new use for the IVUS catheter?. *J Invasive Cardiol*. 2010;22(2):E19–E22.
4. Yang Soon, Chao, Eric Chong, and Giuseppe M. Sangiorgi. "A challenging case of dislodged stent retrieval with the use of Goose neck snare kit." *Catheterization and Cardiovascular Interventions* 75.4 (2010): 630-633.
5. Kim, Moo Hyun, Kwang Soo Cha, and Jong Seong Kim. "Retrieval of dislodged and disfigured transradially delivered coronary stent: report on a case using forcep and antegrade brachial sheath insertion." *Catheterization and cardiovascular interventions* 52.4 (2001): 489-491.
6. Koseoglu, Kutsi, et al. "Retrieval of intravascular foreign bodies with goose neck snare." *European journal of radiology* 49.3 (2004): 281-285.