

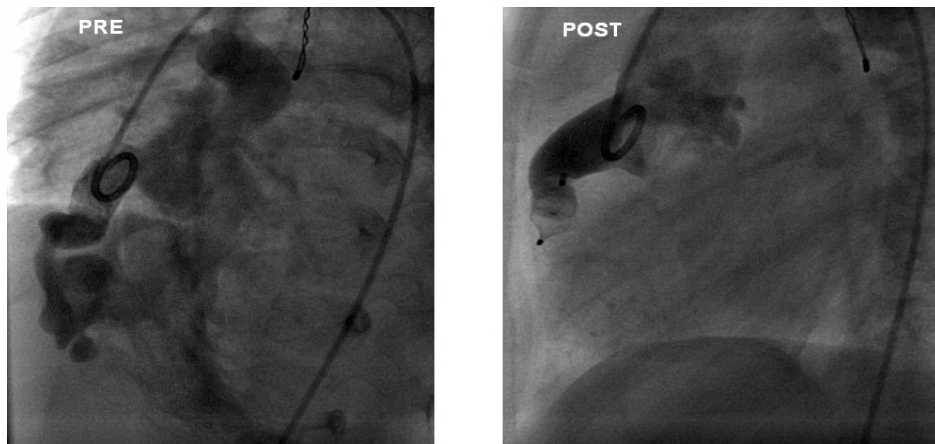
## A new method for percutaneous treatment of coronary artery fistulae in young children

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**Background** : Percutaneous occlusion is nowadays the treatment of choice for coronary artery fistulae (CAF). However, the arterial approach for different devices needs large introducers and catheters during a long procedure. Its use in very young children with large fistulae was hypothetical.

**Method** : A new Plug (Plug "4", AGA-SJM) can be introduced in a 4F catheter. This Plug in Nitinol is retrievable and very easily expanded.

**Patients** : Since 01/01/2010, 3 patients (10 months, 23 months, 28 months) with large CAF presented with clinical heart failure. Two CAF were between the right coronary artery and the right ventricle with multiple sites of drainage, one between the left coronary artery and the right atrium. Only one Plug 4 for each child was necessary with a diameter of 6 mm in the 3 cases. Complete occlusion was achieved immediately in 2, and within a few minutes after a temporary occlusion with a 4F balloon wedge pressure catheter.



**Conclusion**: Large coronary artery fistulae can now be treated percutaneously using small catheters during a relatively simple procedure. This new device brings an elegant solution for large CAF in young children, avoiding open heart surgery.