

Mumbai doctors give Jalgaon woman with rare **heart defect second chance at life**

Hailing from Jalgaon in Maharashtra, Seema Patil had been struggling with breathlessness for a long time before her condition worsened. The doctors found that she was suffering from a rare and complex heart condition known as Sinus of Valsalva Aneurysm (SOVA)



Mumbai doctors have successfully treated a 34-year-old woman, Seema Ravikanth Patil, for a rare and complex heart condition known as Sinus of Valsalva Aneurysm (SOVA). The patient, diagnosed with multiple congenital aneurysms, underwent a meticulously planned surgical procedure that has given her a new lease on life.

It was done by the team of experts at Lilavati Hospital and Research Centre was led by Dr Pavan Kumar, a renowned cardiovascular surgeon, along with cardiologist Dr Nitin Gokhale and cardiac anaesthesiologist Dr Namrata Kothari.

Sinus of Valsalva Aneurysm (SOVA) is an exceptionally rare condition, characterised by the abnormal expansion of the aortic root due to weak elastic tissue. Aneurysms of the Sinus of Valsalva are

observed in approximately 0.09 per cent of the general population and are often associated with congenital heart defects. They predominantly arise from the right coronary sinus (70 per cent of cases), followed by the non-coronary sinus (25 per cent), with occurrences from the left coronary sinus being extremely rare. While individual SOVAs are uncommon, multiple aneurysms are even rarer, with only 18 reported cases globally, six of which have occurred in India. Patil's congenital condition posed significant risks, including the potential for rupture, which can be life-threatening without early intervention.

Hailing from Jalgaon, Maharashtra, Patil had been struggling with breathlessness for a long time. Her condition worsened, and she was admitted to the hospital in an emergency. Tests, including an

echocardiogram and CT scan, showed severe leakage in her aortic valve and some abnormal bulging in the aorta. This complicated issue required advanced care, hence family decided to bring her to Mumbai where they came to know about Dr Pavan.

The team at the hospital performed a complex surgical procedure to repair the aneurysms, restoring normal cardiac function and providing the patient with a new lease on life. Dr. Pavan said, "This patient came in with a serious heart condition. Her tests showed she had two large aneurysms and a leaking aortic valve. After talking to patients, she revealed that she had been experiencing migraines for the past 10 years and was receiving local treatment. However, it turned out her pain was not from migraines but from the leaking aortic valve."

He explained that advanced imaging showed two aneurysms. One is in the Left Coronary Sinus of Valsalva, measuring 4.5 x 3.5 x 3 cm, which presses on the left coronary artery. The other is in the Right Coronary Sinus of Valsalva, measuring 3.5 x 2.5 x 2.5 cm. There is also a complete regurgitation problem with her aortic valve, making surgery urgent.

The Mumbai-based doctor further explained that the patient had three complex heart surgeries at once, which took seven hours. The surgeries included fixing a left coronary sinus aneurysm, closing a right coronary sinus aneurysm, and replacing a severely leaking aortic valve. The left ASOV procedure was particularly difficult due to the tight space between the left coronary ostium and the left ASOV. To create more space, doctors used a new technique that involved flipping the left aortic leaflet towards the left ASOV. This method made it safer to replace the aortic valve and repair the left ASOV. The patient recovered well after the surgery and was discharged in stable condition. She will have regular follow-ups to monitor her heart health.

He noted that they faced a unique challenge because multiple aneurysms are rare and

complicated to treat. The left aneurysm was pressing on the coronary artery, and fixing it needed great precision. Using advanced imaging and surgical techniques, the team successfully repaired the aneurysms and replaced the damaged valve. This case was very rare and complex, as aneurysms of the Sinus of Valsalva are uncommon, and having multiple ASOVs is even rarer. These aneurysms can burst at any moment, leading to serious complications. The innovative technique they used was vital for protecting the coronary arteries and ensuring a successful outcome. Dr. Kumar expressed pride in their team's work and highlighted the advanced care provided at Lilavati Hospital.

Dr Niraj Uttamani, chief operating officer at Bandra hospital, said, "This case highlights the importance of expertise and innovation in treating rare and complex cardiac conditions. Lilavati Hospital continues to set benchmarks in advanced heart care, offering hope to patients with challenging diagnoses. Awareness of rare and complicated conditions often goes unnoticed, leading to delays in patients reaching the hospital for timely treatment. In this case, Lilavati Hospital has operated free of cost, providing the patient with a new lease on life."