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## **Large Ostium Secundum ASD Occlusion with Memopart ASD Occluder**

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### **ABSTRACT**

Transcatheter occlusion of ASD with device is an effective, alternative to surgical repair : feasible and safe procedure with minimal complication rate and short hospital stay, as well as excellent short and long term outcome .However, large ASDs (>38 mm) and defects with deficient rims are usually not offered transcatheter closure but are referred for surgical closure. Transcatheter closure also remains controversial for other complicated ASDs with comorbidities, additional cardiac features and in small children. Previous studies have shown high success rate, low complication rate and less discomfort[1,2] . With the devices and technology currently available, several cohort studies have reported successful percutaneous closure in the above-mentioned complex cases. However the feasibility and safety of transcatheter technique needs to be confirmed through larger studies and longer follow-up.

**KEYWORDS:** OS-ASD ( Ostium Atrial Septal Defect; ASD)

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### **ARTICLE DETAILS**

**Published On:**  
**15 February 2022**

**Available on:**  
<https://ijmscr.org>

Memopart ASD Occluder ; Children; Adolescents; Trans – Esophageal Echocardiography( TEE );  
Device Closure ; Rims.

### **CASE REPORT**

Transcatheter Atrial septal defect ( ASD ) Closure is a widely recognized solution for ASDs. However, information is limited about the use of this treatment for large defects. Here we report a closure of a large OSTIUM SECUNDUM ASD ( OS-ASD ) at Gulbarga Heart Foundation by DR.Veeraj .v.kalburgi and DR.Sudeep Verma. The ASD was measured 32 mm on Trans – esophageal echo ( TEE ) and closed with

a 38 mm device ( shanghai shape memory Alloy, China ). TEE in the cath-lab measured 32 mm OS-ASD with deficient aortic rim.(floppy) and confirmed all the findings of TTE- Transthoracic Echocardiography.

**Patient Information:**

A 38 year old female admitted into hospital with discomfort in the chest.

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Pre-operation:

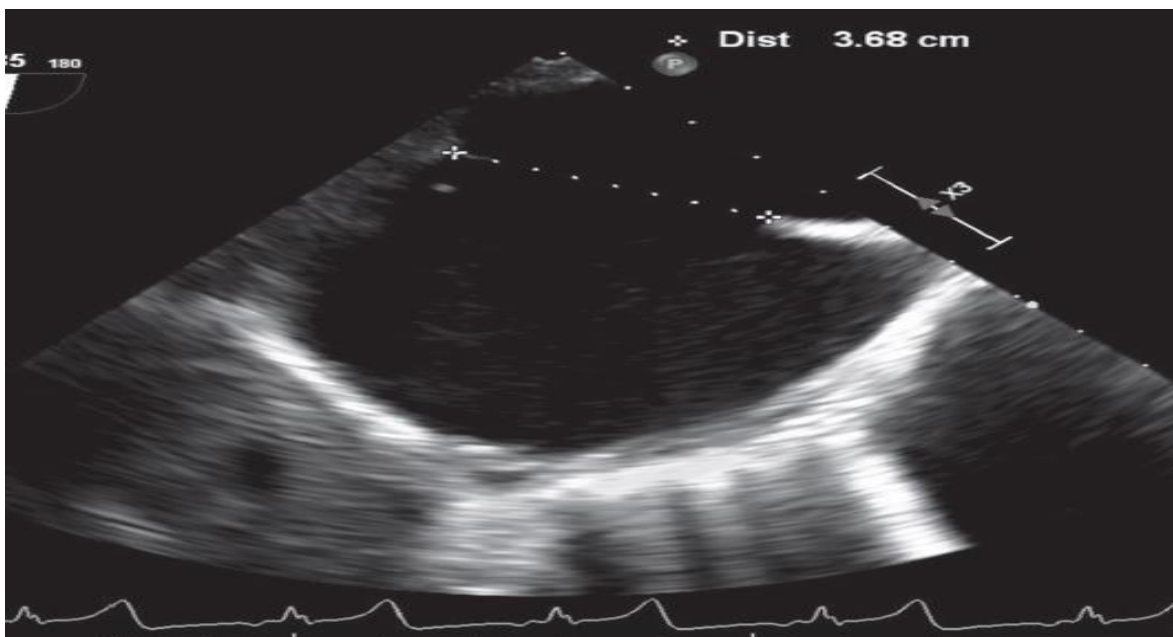


Figure 1: Echo suggested that the patient is having Acyanotic Congenital Heart diseases (Acyanotic CHD), large OS-ASD (SIZE 32 MM). She also has moderate Pulmonary hypertension (RVSP= 40-50MMHG), mild tricuspid regurgitation and her LVEF IS 60%. Doctor advised her to go for surgery and the patient had rejected the plan. Therefore the doctor closed the defect by using 38 mm MemoPart ASD occluder.



Figure 2: TEE image shows large ASD

**During operation:**

under fluoroscopy guidance, a 38 mm MEMOPART ASD OCCLUDER was successfully implanted by the Doctor. The device placement was confirmed with TEE before sheath removal.

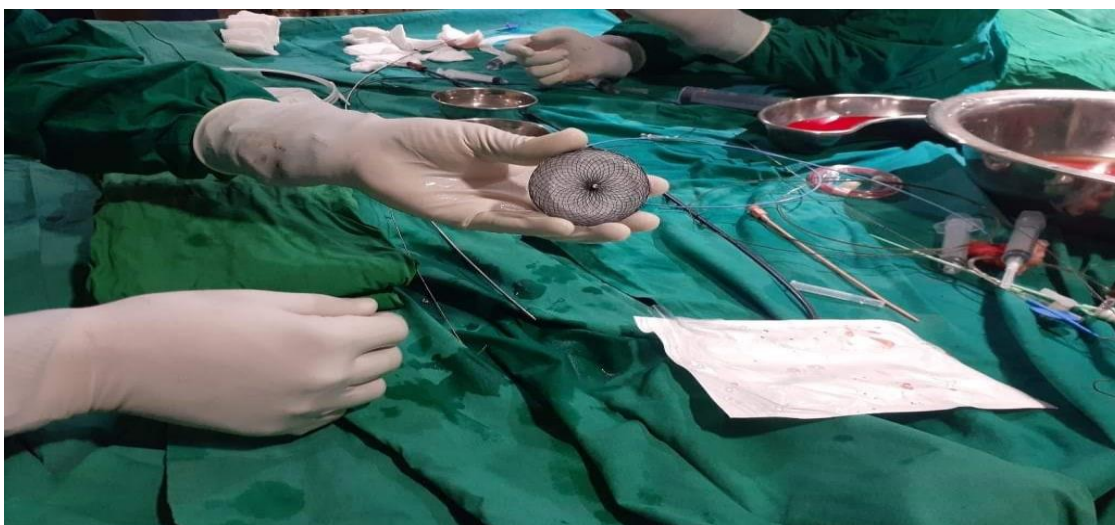


Figure 3: MEMOPART ASD OCCLUDER (physical kneading technique applied to the hub helps with earlier endothelialization and gently reduces thrombosis risk and guarantees long term safety. It has got a well designed stiffness offers excellent supporting force for big desks of ASD0.



Figure 4 : is Compact and uniform Oxide Filmed Nitinol wire effectively Prevents from the release of Nickel ion and Provides of Nickel ion and provides the occluder great hemocompatibility

**Post operation:**

Upon Successful device closure , doctor performed TEE aga in and X-ray examination , no residual shunt was found at the defect. There is also no bleeding at hemostasis site.

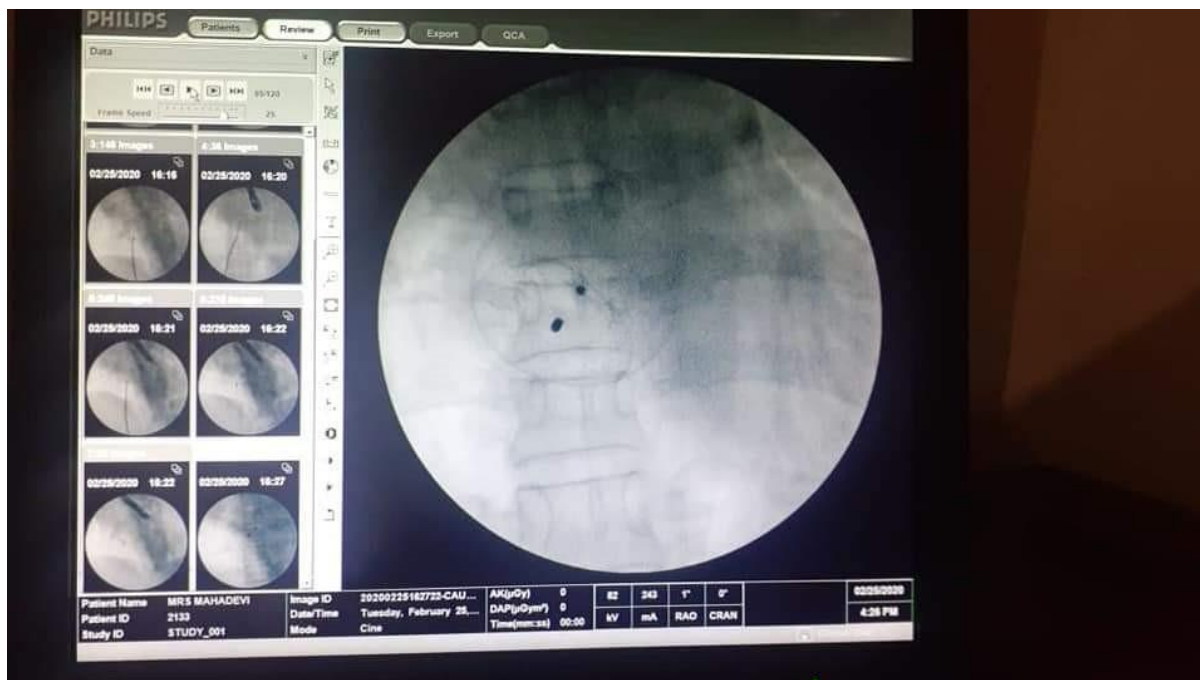


Figure 5: Device after release. Accordingly to recently – Published multicentre study in more than 600 patients having ostium secundum – type ASD in which surgical repair and closure with an occlude device were compared in most percutaneous interventional cases, failure resulted from a wrong selection of occluder sizes. ( 3This case suggested that using Memopart ASD OCCLUDER to close large atrial septal defects is feasible and effective.

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