

## IMPLANT PROCEDURE

One month later, the WATCHMAN™ was implanted. A 30 mm device was successfully and uneventfully implanted under general anaesthesia (Figure 1). The color flow Doppler showed that the device was well seated without peri-device flow at 97 degrees (Figure 2). The whole procedure from start of anaesthesia until the patient

left the room was 2 hours and 5 minutes. The next day X-ray and transthoracic echocardiography were performed, which both showed no complications, after which the patient was discharged home in good condition. No signs of pericarditis, pericardial effusion or groin hematoma were noted.

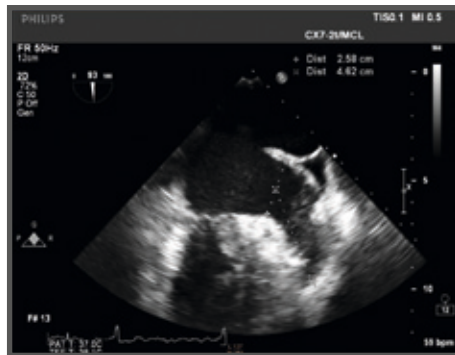


Figure 1

TOE measurement of LAA size in 93°

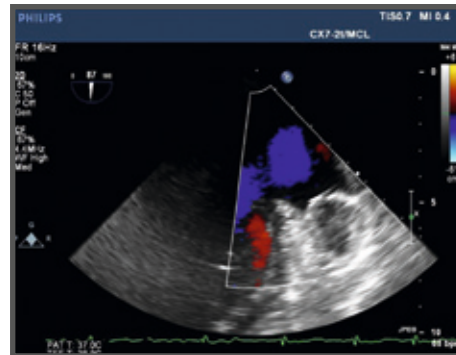


Figure 2

TOE measurement direct after WATCHMAN™ implantation using Color Flow Doppler to detect leakage around the device at 87° (no leakage)

## FOLLOW-UP

6 weeks after implantation, transoesophageal echocardiography showed 100 % closure of the left atrial appendage. No residual flow was noted around the device. No pericardial effusion and no blood clots attached to the device were seen and the oral anticoagulant was switched to acetylsalicylic acid and clopidogrel.

Thereafter, the patient was seen for follow-up at the outpatient clinic. 6 months after device implantation, clopidogrel was stopped and only acetylsalicylic acid was continued. To date, 9 months after implantation, follow up has been uneventful and patient is doing fine.

<http://www.bostonscientific.com/watchman-eu/>

Results from case studies are not predictive of results in other cases. Results in other cases may vary.

All cited trademarks are the property of their respective owners. CAUTION: The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings and instructions for use can be found in the product labelling supplied with each device. Information for the use only in countries with applicable health authority product registrations.

SH-205701-AA JAN 2014 Printed in Germany by medicalvision.

**Boston  
Scientific**  
Advancing science for life™

[www.bostonscientific-international.com](http://www.bostonscientific-international.com)

© 2014 Boston Scientific Corporation  
or its affiliates. All rights reserved.  
DINSH0018EA

Reducing the risk of stroke in atrial fibrillation with  
the WATCHMAN™ Left Atrial Appendage Closure Device

3

## Patient Case



With the courtesy of:

Dr R. Folkerling, Cardiologist Medical Center Leeuwarden, The Netherlands

Dr M. de Wijs, General Practitioner, Leeuwarden, The Netherlands

## PATIENT HISTORY

A 79 - year old man is known with asymptomatic permanent atrial fibrillation associated with hypertension since four years. Eight months prior to referral, the patient suffered from ischemic stroke in the right hemisphere, in spite of treatment with a Vitamin K antagonist (acenocoumarol). His other medical history consists of hypercholesterolemia.

Seven months after the ischemic stroke, patient complained of severe

headache, which was caused by a subdural hematoma. This was treated with a transcranial puncture by the neuro-surgeon in another hospital.

At the time of referral, patient had restarted oral anticoagulants, although the risk for recurrent cerebral bleeding was considered enlarged. His other medication consisted of perindopril 4mg once daily and simvastatin 40 mg once daily.

## TREATMENT SELECTION

### *The perspective of the referring physician*

*M. de Wijs, General Practitioner, Leeuwarden, the Netherlands.*

"After the subdural hematoma, I was puzzled by the two-sided risk for the patient. The neuro-surgeon warned about recurrent cranial bleeding while on coumarines. However, withholding oral anticoagulant would expose this patient to high risk of another stroke. The difficult situation was discussed with the patient, his wife and their daughter. The patient enjoyed life as much as he could. He wanted to live for another 10 years.

I had heard about a new treatment option for patients with atrial fibrillation and a contra-indication for oral anticoagulants. After the consultation with the family,

I discussed this with the cardiologist of the implanting centre, which was in another hospital. As a General Practitioner, I felt like I was intervening in a decision that was to be made by the neurologist and the cardiologist. However, both the neurologist and the cardiologist agreed that this treatment could be a good option for this patient. Therefore, the patient was referred to a third hospital for the procedure."

## TREATMENT SELECTION

### *The perspective of the implanting physician*

*R. Folkerlinga, Cardiologist Medical Center Leeuwarden, the Netherlands.*

The patient had permanent atrial fibrillation since three years and a CHA<sub>2</sub>DS<sub>2</sub>-VAsc score of 5, due to age, previous stroke and hypertension. Despite treatment of oral anticoagulants, he suffered from a disabling stroke. There is no information about the INR levels at the time of this ischemic stroke, but later, the patient experienced a major bleeding for which a neuro-surgical intervention was needed. As this subdural hematoma seems to be chronic, no acute treatment (with high INR levels) could be given. Despite of the stroke with paresis on his left hand and minor walking problems, patient lived with his wife and his quality of life was considered good. He was able to fulfil his normal daily activities, although at a lower pace than previously. As was expected, the patient was anxious of using oral anticoagulants, but he knew, it was not possible to stop these drugs.

Two months after the neuro-surgical intervention, the patient was seen at the outpatient clinic to discuss other possibilities. Patient could switch from an oral anticoagulant to a novel oral anticoagulant (NOAC), as the latter reduces the risk of major bleeding in large randomized clinical trials. However, NOAC's are not considered a safe alternative after major bleeding. In addition, this would still pose the patient to risk for recurrent ischemic stroke. Given this double edged sword of ischemic and haemorrhagic stroke, the possibility of percutaneous closing the left atrial appendage was considered.

After discussing the pros and cons of closing the left atrial appendage with a WATCHMAN™ device, the patient and his family decided to choose this option.

