Introduction: Atrial Fibrillation (AF) is the most common cardiac arrhythmia and is associated with an increased risk of ischemic stroke and systemic embolism. Silent AF (SAF) is an asymptomatic form of AF incidentally diagnosed during routine examination or manifesting as an AF related complication such as ischemic stroke and it oftenly undiagnosed or only diagnosed when complication occur. The incidence of SAF is nearly 25% in patients with a recent stroke. Screening for SAF episodes is beneficial for high-risk groups for atrial fibrillation.

Methods: A sinus-rhythm hypertensive and dyslipidemic 79 years old female with cholecystitis and chronic lungs disease, suddenly experienced left hemiplegia and motoric aphasia, 3 days post laparotomy cholecystectomy surgery, preceded by rapid ventricular response atrial fibrillation. Echocardiography showed LVEF 80%, dilated LA, concentric LVH, severe TR, and moderate PR. Acute infarctions were found at right frontal lobe, parietal lobe, and corona radiate by MRI.

Result: This patient has a high-risk profile for AF from age, hypertension and chronic lungs problem and may has under-recognized and under-diagnosed SAF. Thus the diagnosis of SAF is too late and occured unexpectedly either by the physicians and the family at the unfortunately timing which were in her postoperative period.

Conclusion: Silent paroxysmal atrial fibrillation is very difficult to be detected because it can be occur at any unpredictable time. Primary prevention measures, risk factors control and early screening are very important to reduce the risk of embolic stroke. Implementation of screening devices and technologies for detecting AF in the community may evolve rapidly as new technologies and algorithms emerge. It is estimated that AF-related strokes and AF-related deaths could be prevented if everyone with AF was appropriately managed.