

Necessity of 45-day Transesophageal Echocardiography after WATCHMAN Procedure amid the COVID-19 Pandemic

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No Conflict of Interest

Necessity of 45-day Transesophageal Echocardiography after WATCHMAN Procedure amid the COVID-19 Pandemic

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- ! Amid the COVID-19 outbreak, elective aerosolizing procedures such as TEE should be deferred as the procedure provokes coughing and gagging, which can cause aerosolization of the virus.
- ! According to American Society of Echocardiography (ASE), the risks and benefits of performing TEE should be considered for patients who are COVID-19 positive, and patients who may be asymptomatic.
- ! In atrial fibrillation patients undergoing left atrial appendage closure (LAAC), TEE is typically performed at 45 days to assess peri-device flow <5mm and an absence of device-related flow.

Background

- ! Amid the COVID-19 outbreak, elective aerosolizing procedures such as TEE should be deferred as the procedure provokes coughing and gagging, which can cause aerosolization of the virus.
- ! According to American Society of Echocardiography (ASE), the risks and benefits of performing TEE should be considered for patients who are COVID-19 positive, and patients who may be asymptomatic.
- ! In atrial fibrillation patients undergoing left atrial appendage closure (LAAC), TEE is typically performed at 45 days to assess peri-device flow <5mm and an absence of device-related thrombus (DRT) before oral anticoagulation (OAC) is discontinued.
- ! We sought to investigate whether a 45-day TEE is absolutely necessary for patients who underwent LAAC amid the COVID-19 pandemic.

Methods

- ! We retrospectively studied 200 patients who underwent successful WATCHMAN procedure the Rochester General Hospital (June 2016 - June 2019).
- ! All patients were maintained on OAC and aspirin upon discharge until 45-day TEE was performed.
- ! We aimed to assess TEE measured peri-device flow at the time of WATCHMAN implantation and at 45 days.
- ! We also aimed to evaluate the incidence of DRT on 45-day TEE.

Results

Conclusion

- ¥ The incidence of significant peri-device flow and DRT at 45 days is very low. 45-day TEE post-WATCHMAN implantation may not be necessary for all patients, and OAC may be safely discontinued at 45 days without a TEE.
- ¥ Deferring 45-day TEE post-WATCHMAN implantation has the potential to minimize use of PPEs and reduce preventable risks of viral transmission amid the COVID-19 outbreak.