ERRATUM

Erratum to: Guidelines for conducting transesophageal echocardiography (TEE)

Task force for guidelines for conducting TEE: November 15, 2015

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Two important elements were omitted when the original version of this article was published: *Information Sheet and Consent Form for Transesophageal Echocardiography (TEE)* and *Record of Conduct/Progress of Transesophageal Echocardiography (TEE)*.

The forms are shown as follows.

The online version of the original article can be found under doi:[10.1007/s12574-016-0281-9](https://doi.org/10.1007/s12574-016-0281-9).

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Information Sheet and Consent Form for Transesophageal Echocardiography (TEE) Pages 1/2

Information Sheet and Consent Form for Transesophageal Echocardiography (TEE)

Patient Name _____

About Transesophageal Echocardiography (TEE)

Transesophageal Echocardiography (TEE) is a form of medical examination in which non-hazardous ultrasound is applied to the heart internally (via the esophagus) so that internal structures of the heart as well as the aorta may be observed for diagnosis. Because the esophagus is located adjacent to the heart, this method allows the structures of the heart to be observed in detail, and thereby enables physicians to make more accurate diagnoses. Compared with conventional transthoracic echocardiography, TEE is beneficial in that it allows acquisition of clearer images.

How TEE Is Conducted

- A medical device called a "probe," similar to an endoscope used in upper gastrointestinal endoscopy (commonly known as examination by gastric camera), is inserted via the mouth into the esophagus. It takes about 15-30 minutes to complete the examination procedure.
- As in upper gastrointestinal endoscopy, the procedure is conducted with the larynx under local anesthesia.
 - How local anesthesia is applied: A local anesthetic called Xylocaine (an anesthetic for use in dental procedures) in jelly form or in spray form will be used. (Please notify the physician if you have felt sick after application of anesthetics at the dentist's or in other medical institutions.) Hold the Xylocaine jelly in your mouth for about 10 minutes. Xylocaine spray is sprayed over the throat to anesthetize it.
- Sedation: Pretreatment such as injection of sedatives may be conducted.
 - Sedation: Sedation by injection drugs such as midazolam or propofol may be required depending on the patient's condition. For this purpose, an intravenous infusion is administered prior to conducting the examination.
- In the Case Where Sedation Is Not Provided
 - While TEE can be conducted without sedation, it may not be continued due to pain.

Pretest Precautions

- Before undergoing TEE, you must submit the consent form. Please read and understand the information about TEE and sign the consent form.
- Please notify the physician if you have an esophageal diverticulum, have received radiation therapy in the chest or in the neck, have esophageal varices, have an esophageal tumor, or have a rare-type hiatal hernia (paraesophageal hiatal hernia), as such conditions may lead to accidental symptoms.
- Please refrain from taking meals or beverages at least four hours before the examination. If it takes place in the morning, please do not have breakfast. If it takes place in the afternoon, please do not have lunch. Note that your medicine should be taken as usual; when you take the medicine, it is acceptable to use half a glassful of water.
- During the procedure, you are required to wear a mouthpiece in your mouth, so please remove lipstick prior to the examination. If you are wearing removable dentures such as false teeth, remove such dentures prior to the examination. Glasses should also be removed.
- Please do not drive to the hospital as sedatives may be used during the procedure.

Posttest Precautions

- Please do not eat or drink for one or two hours after the completion of the examination as the local anesthetic applied to the throat is still effective. Also, please refrain from smoking. However, you may rinse your mouth. Laryngeal gargling, holding water in the mouth with the head held back, must not be conducted while the anesthetic is still effective in order to avoid the risk of aspiration.
- When the anesthetic applied to the throat wears off, swallow a small amount of water and ensure that the water does not choke you before you start to take meals or beverages.
- If you are an outpatient, you are recommended to rest in the hospital for about an hour before you go home. If you have been given an intravenous injection of a sedative, you are recommended to rest in the hospital for about two hours before you go home because it may take some time before you are fully awake.
- If you have been given a sedative, please do not drive home from the hospital.

(Continued on Next Page)

Information Sheet and Consent Form for Transesophageal Echocardiography (TEE) Pages 2/2**Possible Complications That May Occur as a Result of TEE**

While TEE is an examination that is normally carried out safely, some respects should be noted as indicated below.

1. Persons with an esophageal ulcer or diverticulum or varicose veins may be contraindicated for this procedure as the probe may contact such sites and may cause esophageal perforation (i.e., a hole made in the esophagus) and bleeding. If you have a liver disease, esophageal varices may be present before you realize, so care should be taken. For these reasons, please notify the physician beforehand if you have abnormality in the esophagus or if you have a chronic liver disease. If perforation or bleeding occurs, surgery may be required.
2. Even if you do not have an esophageal ulcer or diverticulum, perforation in the hypopharynx or in the esophagus may occur (accidental symptoms). The incidence of such cases in Europe and the United States has been shown to be 0.01% or less.
3. Furthermore, complications such as pain, vomiting, bronchospasm, laryngospasm, attacks of tachycardia, bradyarrhythmia, hypoxemia, low blood pressure, high blood pressure, anginal attacks, laryngeal bleeding, swelling of the tongue, hypoglossal nerve paralysis, recurrent laryngeal nerve palsy, esophageal injury, respiratory depression under sedation, development of acute aortic dissection, and infection by way of probes have been reported.
4. Allergy and/or low blood pressure may be caused by anesthetics or sedatives used during pretreatment.
5. Low blood pressure and/or irregular heart beat may be caused in patients with serious cardiac disease or patients in poor general condition, and may lead to dangerous conditions.
6. Bleeding from the esophageal mucosa may occur. In most cases, bleeding stops in time and will cause no further trouble. However, care should be taken by persons who take antiplatelet drugs or anticoagulant drugs as such bleeding may lead to massive bleeding.
7. In the case where an emergency situation occurs, prompt and appropriate measures shall be taken. In such cases, emergency admission or emergency surgery may be required. Furthermore, an accidental symptom may lead to death.

If you have any questions, please feel free to contact us.

This test is conducted to diagnose your condition. Please read this information and fully understand the contents before you undergo this test.

Date of Explanation: Month Day Year

Name of Physician Providing Explanation _____

Consent Form

To: Director of ○○Hospital

Transesophageal echocardiography (TEE) has been explained to me, and I have been given sufficient opportunities to ask about the procedure. I also understand that I may be required to receive additional procedures as needed, if occurrence of an emergency situation during the test necessitates such procedures. I consent to undergoing this examination.

Month_____Day_____Year_____

Signature of Patient

Signature of Witness

_____ (Relationship to Patient)

Record of Conduct/Progress of Transesophageal Echocardiography (TEE)

Record of Conduct/Progress of Transesophageal Echocardiography (TEE)

Patient's Name							
Patient's Number			Physician in Charge of the Test				
Test Date	Month	Date	Year	Physician			
Laboratory Technician			Nurse				
Sedative			Dilution			Total Amount Used	
		Midazolam (1A=2ml 10mg)		Dilute 10 mg up to a total of () ml.		ml	
Details of Procedure	Clock time	Sedative (Midazolam)	Blood Pressure (mmHg)	Heart Rate (Beat/Minute)	SpO ₂ (%)	Amount of Oxygen Administered (via Nasal Cannula)	Recorder Signature
Entry	:		/			(L/min.)	
Denture Check	:		/			(L/min.)	
Intraoral Local Anesthesia (Xylocaine)	:		/			(L/min.)	
	:	(ml)	/			(L/min.)	
	:	(ml)	/			(L/min.)	
	:	(ml)	/			(L/min.)	
	:	(ml)	/			(L/min.)	
Probe Removal	:		/			(L/min.)	
Administration of 0.2 mg Flumazenil	:		/			(L/min.)	
Exit	:		/				
Remarks							