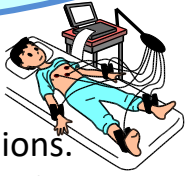


Physiological test for Diabetic complications

① Electrocardiogram (ECG)

- Heart (Cardiovascular) disease is one of the most critical diabetic complications.
- An ECG can find the sign of myocardial infarction or neuropathy affecting the heart.



② Ultrasound examination for Heart, Abdomen, and Neck

- Heart (cardiac) ultrasound (echocardiogram) examination shows how well the heart movement is, and the valves are performing.
- Abdominal ultrasound examination shows the condition of significant organs in the abdomen, including the liver, kidneys, pancreas, spleen, gall bladder, and aortas.
- Neck ultrasound examination checks major arteries of the neck and shows whether there are any signs of thickening and/or stiffening in your arteries (arteriosclerosis).



③ Ankle-brachial index/Pulse Wave Velocity (ABI/PWV)

- ABI/PWV simultaneously measures blood pressure, electrocardiogram, and phonocardiogram, with blood pressure measured at four sites (i.e., both wrists and ankles).
- This combined examination shows clues as to how stiff your arteries are, as well as to the presence or absence of arterial occlusion.



④ 24-hour blood pressure measurement

- An observation test of continuous blood pressure measured every 30 or 60 minutes for 24 hours, with keeping record on what you were doing during that day.
- This can reveal the risk of hypertension precisely and the changes in blood pressure associated with physical activity, which can sometimes be disordered by diabetic neuropathy.

④ Nerve conduction studies

- This study measures how fast an electrical impulse moves through your nerve and is performed to evaluate the severity of nerve damage or “neuropathy,” which is one of the major diabetic complications.
- In this study, electrodes are put on the skin of hands, arms, feet, or legs, sending a small electrical current to stimulate the nerves, and the speed of transmission is calculated. The result shows the degree of diabetic peripheral neuropathy.

*Only basic information are given here.

Please consult your doctor or nurse about practical preparations and procedures.