



# INFORMATION FOR PATIENTS UNDERGOING HEMODYNAMIC STUDY BY RIGHT-SIDED CATHETERISATION

Azienda Sanitaria Universitaria Giuliano Isontina

A hemodynamic study by right-sided catheterization is indicated for the diagnosis and treatment of the following pathologies:

- Chronic ischemic heart disease – angina/exertional ischemia
- ACS-Acute Coronary Syndrome
- Left ventricular dysfunction – heart failure
- Aborted cardiac arrest
- Valvulopathy
- Pulmonary arterial hypertension

Your Doctor deemed it appropriate to perform this procedure in order to obtain useful information both in terms of diagnosis and to better treat your heart disease.

This procedure is performed in the hemodynamics room or in the intensive care unit; after a local anesthesia, the doctor will puncture a vein (brachial, femoral or jugular) and introduce a probe (catheter) through it to the heart. Under radiological control, the catheter will be placed in the different heart chambers. The necessary measurements can then be performed (intracavity pressure, cardiac output, etc.). It is possible that these measurements are repeated after the administration of oxygen or some medicines, in order to better verify the functioning of the heart after such therapies.

### **Predictable outcomes of non-treatment**

Non-execution of the investigation implies an incompleteness of the diagnostic-therapeutic procedures aimed at defining and treating my disease.

### **Most common risks of this procedure**

The hemodynamic study is a safe and very useful procedure, although it presents some rare complications. They can be secondary to the puncture of the vessel and to the catheterization (introduction of the probe into the bloodstream).

As regards the complications related to the puncture of the vessel, the risks are hematomas (collections of blood) in the puncture site and acute occlusion (closure) of the vessel.

Such complications rarely occur.

In some cases a vagal reaction may appear at the time of the sting with nausea, hypotension and bradycardia. Most of these complications resolve spontaneously or with pharmacological therapy. More rarely, interventional or surgical procedures are required. Exceptionally, serious or permanent damage may result.

Complications related to catheterization are also rare and are represented by transient hypokinetic arrhythmias (slow heart rate) and cerebral stroke of an embolic nature. With the techniques employed at this time the rupture of the great vessels or of the cardiac chambers is a very rare complication.

In the hemodynamics room, there are the necessary equipment and trained personnel in order to deal with any emergency.

## **SPECIAL WARNINGS**

### **ALLERGY TO IODINE**

The procedure may include the need to administer a contrast agent containing iodine. Patients with previous allergic episodes following ad-

ministration of iodine or angiographic investigations must undergo particular medical treatment (pre-medication with antihistamines and cortisone) in the previous 24 hours.

## **PREGNANCY**

Due to the use of X-rays, it is necessary to inform the doctors of a possible pregnancy or pregnancy in progress.



### **THE PROCEDURE WILL BE CARRIED OUT BY ONE OR MORE OF THE FOLLOWING DOCTORS:**

- **dr. Andrea Perkan**
- **dr. Serena Rakar**
- **dr. Giancarlo Vitrella.**
- **dr. Enrico Fabris**
- **dr. Davide Stolfo**
- **dr. Matteo Dal Ferro**
- **dr. Marco Anzini**

### **HAEMODYNAMICS AND INTERVENTIONAL CORONARY UNIT**

**Responsible: dr. A. Perkan**

#### **CONTACTS**

**Secretariat 040 399 4865;**

**Hemodynamics room 040 399 4988**

**Hospitalisation 040 399 4871-040 399 4899**

Drafted by ASUGI's Communication, External Relations, Press Office, URP on the basis of texts provided by dr. Perkan of the Cardiology Department

## **CARDIOLOGY DEPARTMENT**

Director: prof. Gianfranco Sinagra

Revision 01 – April 2022