

## **LIPID CLINIC**

The vast majority of patients with HLP will be under the care of a general practitioner. Patients with a resistant disorder, with extremely high lipid values, patients with familial hypercholesterolemia, with xanthomatosis, with intolerance to common hypolipidemic drugs with a combination of several serious risk factors, as well as patients with an extremely high risk of CHD should be examined more closely by a specialist dealing with disorders of lipid metabolism. Some of them will remain under the permanent care of specialists after the consultation examination, others can only be checked occasionally during permanent dispensary by a practitioner. The last part of the patients, after one examination by a specialist, will return for further treatment only by a general practitioner. Even with regard to prescription restrictions, specialists (internist, cardiologist, diabetologist, endocrinologist) will take care of a number of patients.

## **ORGANIZATION OF LIPID CLINIC**

It is ideal if the lipid clinic is an ambulatory part of an inpatient facility with the availability of other consultation services, with the possibility to hospitalize complicated cases and provide examinations and possibly also a treatment of complications of atherosclerosis. However, this condition does not always have to be met, it is certainly sufficient if, for example, a privately run metabolic ambulance with qualified inpatient facilities has the necessary contact. A number of commonly performed examinations can also be arranged on an outpatient basis, at a cooperating polyclinic. From the point of view of hospitals, it would be desirable if practically every hospital with a coronary unit and absolutely necessarily a hospital with developed invasive cardiology and cardiac surgery either had its own lipid clinic or was in close contact with it.

The team of the lipid clinic consists of a doctor, a nurse, ideally also a dietician and a specialist focused on a healthy lifestyle (physical activity and treatment of tobacco addiction).

A doctor who runs a lipid clinic should meet some basic requirements. First of all, they must have sufficient clinical erudition (the requirement of at least the "specialization in clinical medicine. He or she will meet patients after angioplasty, after cardiac surgery (which he/she should indicate himself in necessary cases!), with the manifestation of atherosclerosis in various locations, with complications of hypolipidemic treatment and with other risk factors. Although consilia are of course necessary in indicated cases, sending a patient to an internist for treatment of uncomplicated arterial hypertension is not acceptable. It is not the most pleasant for patients either, when they have to visit a lipidologist, a cardiologist, a diabetologist, an angiologist one after the other just for a prescription for a drug or for a routine check-up... The lipid clinic could thus become only an office issuing cholesterol and triglyceride values, sometimes recommending a diet or sometimes medicament. In addition to clinical erudition, a lipidologist should of course have at least a basic knowledge of biochemistry and clinical genetics. I consider regular training in the field of lipidology to be extremely important, be it in the form of regular classes, lectures or seminars. It can be considered a certain advantage, especially with regard to a more complex view of the patient, if working in a lipid consultation is not the only professional content. Working in a cardiology, internal medicine or endocrinology-metabolism department might seem more beneficial. On the other hand, however, this wider scope can lead to considerable overload if we want to maintain the appropriate standard in all areas.

The role of a nurse in a lipid clinic includes routine work from blood sampling to taking care of medical records. A qualified nurse could also be more useful when working with families, when looking for other disabled individuals, etc.

It is very appropriate if nurses are able to calculate cardiovascular risk, e.g. according to the SCORE system, they can be trained in patient education and will then at least partially replace the diet nurse. In our center, nurses are also trained in other methods, such as measuring ankle pressure with ultrasound, etc.

Nutritionists are still missing in most of our counseling centers. Basic dietary instructions are usually given by a doctor. However, the role of the dietitian/nutritionist should be specific advice to patients and the compilation of diet charts and menus. The mere handing over of materials is very unfortunate; these should always be explained to the patient and discussed with regard to the dietary habits of the specific patient.

## **DESIGN OF STANDARD EQUIPMENT FOR LIPID CLINICS**

### 1. Common equipment:

- Scales, tape measure to measure height, tape measure to measure waist circumference
- Stethoscope

### 2. Instrumentation:

- Tonometer with a cuff on the arm regularly calibrated by a specialist company, ESH/ESC approved type
- ECG device
- Pen USG device and sphygmomanometer for measuring ABI (ankle brachial pressures)

### 3. Standard equipment for blood sampling

#### **Collaborating departments:**

- a collaborating laboratory to perform laboratory tests and process, freeze and preserve DNA samples
- carotid sonography
- Echocardiography
- Bicycle or other exercise ergometry
- Myocardial SPECT
- Myocardial calcium score
- CT angiography of peripheral arteries
- Coronary angiography