Post-ischaemic stroke management and secondary prevention in primary care

For patients treated under the stroke care pathway standard

After the end of inpatient treatment

In accordance with the stroke care pathway standard, a patient with ischaemic stroke is treated in a hospital with a stroke unit.

After the end of inpatient treatment, **the patient must visit the family physician within 30 days of returning home.**

Family physician's appointments

When leaving the stroke unit:

- The attending physician or stroke nurse has given the patient and/or their relatives an overview of the patient's state of health and the treatment given, and explained the further treatment arrangements.
    - In case of clinical need, the attending physician will arrange a referral for follow-up care, inpatient nursing care, or inpatient/outpatient rehabilitation (including daily physiotherapy and occupational therapy).
- A scheduled secondary prevention follow-up appointment with a stroke nurse 90 days after the stroke and the end of active treatment. Follow-up by a neurologist is planned if treatment and aetiology need to be further clarified.

The family physician **will pay attention to the patient's medical history in terms of hospital treatment, in particular the aetiology of the stroke**, as it will significantly influence further treatment. **Secondary prevention guidelines will be set out in the medical history**.

During the follow-up visit, the family physician performs a **blood lipid profile analysis and, for diabetic patients, a glucohaemoglobin analysis** and also **assesses the need for further tests and analyses** according to the patient's condition and the recommendations given in the medical history.

- In the case of a stroke of uncertain aetiology, it is prudent to repeat the cardiac rhythm study to detect possible atrial fibrillation (AF) paroxysms, if possible, for a duration of 48 to 72 h.[1]

[1] The Estonian Ludvig Puusepp Society of Neurologists and Neurosurgeons. European Stroke Organisation's stroke action plan in Estonia. 2024. 'Management and secondary prevention after ischaemic stroke and transient ischaemic attack (TIA) in primary care and secondary prevention at primary level'

The family physician advises on changes in lifestyle and assesses the patient's functional capacity. If, in the period following hospitalisation, the need for additional services arises due to a specific functional disorder, the family physician will refer the patient to a physiotherapist, speech therapist, or psychologist. If there is a need for all of the above forms of therapy, the patient will be referred to a rehabilitation doctor for comprehensive care. For questions related to the clarification of the patient's neurological condition, the family physician will carry out an e-consultation with a rehabilitation doctor or neurologist.

Patient management based on the aetiology of ischaemic stroke diagnosis

Studies suggest that the risk of ischaemic stroke recurrence is 9–15% per year. 27–40% of strokes recur within ten years. The main treatment goals and the primary care principles and approach according to the ENNS guideline on secondary prevention of ischaemic stroke are outlined below.[1]

All patients diagnosed with stroke:

☐ **Target blood pressure of < 130/80 mmHg**

☐ Patients with a diagnosis of **diabetes or insulin resistance** usually have a **target HbA1c of < 7%**.

☐ **Changes in lifestyle:** Informing and motivating the patient: quitting smoking, sufficient physical activity, losing weight if overweight or obese, quitting alcohol, a balanced low-salt Mediterranean diet. If possible, referral to a specialist – tobacco cessation office, alcohol disorder counselling office, nutrition counsellor-nurse.

Patients with large artery atherosclerosis or patients with unknown aetiology or cardioembolism will be treated according to the 'Post-stroke management and secondary prevention in the primary care setting' guidelines[1]**.**

Possible post-stroke complications to watch out for and take into account in prevention activities[2]:

- Anxiety
- Cognitive disorders
- Difficulties in communication
- Contractures
- Depression
- Swallowing disorder
- Falling
- Fatigue
- Bone fractures
- Shoulder pain
- Restricted movement
- Osteoporosis, pressure lesions,

- Epilepsy episodes
- Skin changes
- Spasticity
- Deep vein thrombosis
- Thromboembolism
- Bladder or bowel incontinence
- etc.

Other principles

 Driving a motor vehicle and having a weapons permit. It is recommended to suspend valid health certificates following a stroke. A consultation with a specialist may be necessary to reinstate the certificates.

 Consultation with an occupational health physician. If there is a need to clarify the further treatment of the medical condition and work-related recommendations (including the conditions for return to work), it is recommended to book an e-consultation with an occupational health physician.

 Notifying the local government. If the family physician notices that the patient is unable to manage independently at home, either temporarily or permanently, for reasons related to their state of health, capacity for activity, or living environment, **the family physician will, if possible, inform the local government or refer the patient or their family member to the local government.** If the patient uses the services of a stroke coordinator, **the family physician will give information to the stroke coordinator about the coordination of further necessary activities**.

 Contacting the stroke coordinator. If the family physician requires additional information, assistance with the patient's adjustment to the home environment, or a referral to follow-up services, **the stroke coordinator can provide support through the coordination service.** The family doctor can contact the coordinator by phone or email (only in encrypted form if personal data is shared). The stroke coordinator supports the patient during the treatment for **365 days** from the day of discharge from the stroke unit.