**Instructions & scheme for case report**

Dear Student!

During the neurology practice, You have to ask for a patient to write a case report about from one of the doctors on the wards together with a Hungarian student.

* About one patient maximum 2 student can write a case report (one English programme and one Hungarian student).
* It’s suggested to start writing the case report on Monday or on Tuesday (the first or the second day of the week). **It’s strongly recommended to start writing the case report at the first week of the practice.**

The first day, You have to collect the anamnestic data (from the patient and from the medical documents) and You have to do a short general and a detailed neurological examination. Afterwards, You have to control the patient every day at least for 4 days, check the changes in the status, the laboratory and radiological examinations, the results of the medical consultations and the changes in the therapy (from the green charts and the medical documents).

It is strictly prohibited to take photos of the patient’s documents!

Based on the above information, **the case report has to contain the following parts**:

* Personal data
* Anamnesis (family history, previous diseases, present complaints, medication, drug allergy, habits, gynecology for female patients)
* Status (short internal/general status and detailed neurological status, summary)
* Examinations (labs, radiological examinations, consultations)
* Follow-up
* Diagnosis
* Therapy
* Epicrisis (summary)

Please find below the [*detailed instructions*] and the scheme.

Please find here the most important rules:

* The case report should contain every part that mentioned above and won’t be accepted if any of the above parts are missing.
* It is strongly recommended to hand in the case report to correction during the practice.
* After the end of the practice, the deadline of the handing in is 1 month. If 1 month passed, the doctor has the opportunity to refuse the correction of the case report and You have to start a completely new one from the beginning with a new patient.
* The handing in of the case report has to be arranged with the doctor (printed, e-mail,…).
* The correction has to be done within 1 week by the doctor, BUT if You miss to mention important parts and the case report has to be sent again, the correction can take more time. Please always take this into account when You arrange Your exam date or any other program!
* If the case report is accepted, it has to be printed, stamped and You have to hand it in to the Educational Adviser together with Practice Book. The practice won’t be signed without an accepted case report.

Have a nice work!

**UNIVERSITY OF DEBRECEN**

**DEPARTMENT OF NEUROLOGY**

**CASE REPORT**

**Name:**

**Neptun ID:**

**Date:**

**Case report**

**Personal Data:**

**Name:** [*only initials*] E. G.

**Date of birth:** 1950.01.01.

**Occupation:** retired, before he was a teacher.

**Address:** [*only the city*] Debrecen

**Date of admission:** 2019.09.09.

**Anamnesis:**

**Family history:**

His mother was died because of old age when she was 99 years old. His father died because of acute myocardial infarct at the age of 80 years. He has one brother; he has hypertension that is kept under control with anti-hypertensive drugs. He has one son, and he is healthy.

He has no other family history of cardiovascular diseases, stroke, diabetes mellitus, malignant diseases, psychiatry disorders or other concomitant diseases.

**Previous Diseases:** [*all known disease, operation and hospitalization has to be mentioned in chronological order in whole sentences. If relevant, the birth condition and development and vaccination has to be mentioned also (e.g. patient with epilepsy). The medical documents of the patient can be used.*]

Birth and development conditions. Hypertension is known since 20 years. Non-Insulin Dependent Diabetes mellitus was diagnosed in 2010, the patient is regularly controlled at the Department of Internal Medicine. In 2012, the patient was treated because of pneumonia at the Department of Internal Medicine. In 2017, laparoscopic cholecystectomy was done without complications. In 2018 May, he had a car accident, he had arm fracture which was operated at the Traumatology.

**Present Complaints:**

He arrived to the Emergency Department having sudden onset of double vision and numbness on the right side of the body lasting from 2 hours. He didn’t have paresis or speech disturbance. There was no loss of consciousness. He was within the time window for thrombolysis and he was referred to the neurologist on call. He was admitted to the Department of Neurology, Intensive Care Unit on 2019.09.09 at duty time.

**Habits:**

He is not a smoker.

Has one glass of alcohol on a regular basis when he goes out.

Drinks two cups of coffee a day.

**Gynecology:** [*on female patients*] AB: sp. AB: P: G: OAC:

**Medications:** [*mention every drugs that the patient takes regularly with doses*]

5/1,25 mg Coverex AS (perindopril + indapamid) in the morning, 5 mg Normodipine (amlodipine) in the evening, 2x1000 mg metformin.

**Drug Allergies:**

He does not have any known drug allergies.

**Status**

**General examination**

Blood pressure: right: … mmHg, left: … mmHg, pulse rate: … /min., regular.

He appears well nourished and is not obese. No pale skin or cyanosis is seen. He has varicose veins and slight discoloration on his left lower limb. No sign of jaundice or other mucus membrane disorder was seen. No palpable lymph node at any body part.

No murmur was heard at any vessels around the cervical region during auscultation.

Chest was normal and there was no sign of respiratory difficulties. Auscultation was normal, no murmurs and the heart was rhythmic.

Abdominal exam was normal and the abdominal sounds could be heard properly. No abdominal pain, mass, organ enlargement or ascites was observed.

No edema or sign of DVT was recognized upon lower limb palpation.

Pulsation of a. dorsal pedis present.

**Neurological examination**

No external signs of head injury can be observed. There is no nuchal rigidity. Brudzinski and Kernig signs are negative. No other signs of meningeal irritation can be observed.

Cranial nerves

I. All tested odors are sensed equally and named correctly in both nostrils. The patient does not report any pathological sensation of smell.

II. Intact visual acuity bilaterally. The confrontation test does not reveal any defect in the visual fields. On the optic fundi the disc edges are sharply defined. The color of the disc is pink and the size and regularity of the retinal vessels are normal. Spontaneous venous pulsation can be observed. No abnormal retinal pigmentation.

III.-IV.-VI. The pupils are round, equal in size and 3-4 mm in diameter. The pupils react equally to light both directly and consensually. The pupils react to accommodation and convergence equally bilaterally. There is no lid retraction, lag, or ptosis. Extraocular movements are intact in all directions of gaze. Nystagmus cannot be observed. Does not report diplopia.

V. The bulk, tone and strength of the masticatory muscles are normal, and equal on the two sides. With the mouth open the mandible does not deviate. The sensation of touch, pin prick, cold and heat is intact and equal on the face in all three divisions of the trigeminal nerve. Recognizes the numerals written on the skin of the face in all three divisions of the nerve. The exit points of the supraorbital, maxillary and mental nerves are not sensitive to pressure. Brisk corneal reflex can be elicited on both sides.

VII. The face is symmetrical at rest. Smiling, shutting eyes and frowning are performed symmetrically and whit equal strength on both sides. Taste sensation is intact on the anterior two-thirds of the tongue. Brisk corneal reflex can be elicited on both sides.

VIII. Hears whispered voice at fifteen feet (five meters) in each ear. Weber: sound heard equally in both ears. Rinné test: air conduction is better than bone conduction bilaterally. Nystagmus cannot be seen. Stands straight in Romberg position. Does not deviate at Bárány test. Does not sway or fall when walking with eyes closed.

IX.-X. The uvula is central. The palatal arches are symmetrical. The palatal and gag-reflexes are of medium intensity and can be evoked on both sides. Swallowing and phonation are performed well. Recognizes tastes and feels them equally on both sides on the posterior one-third of the tongue.

XI. The shape, bulk, tone and strength of the trapezoid and sternocleidomastoid muscles are equal on both sides. Shrugging the shoulders and turning the head to each side against resistance is performed with normal strength.

XII. The protruded tongue is central. Neither atrophy nor fasciculation can be observed.

Motor function

The bulk, tone and strength of the skeletal muscles are intact throughout the extremities and the trunk. Holds both upper and lower limbs lifted outstretched into the air. There is no pronator drift. Able to walk on heels and toes. No involuntary movements are present.

Sensation

Senses touch with a small wipes of cotton, pin prick, hear and cold equally on all extremities and the trunk bilaterally. Position sense and small joint movement sense is intact in all 4 extremities. Recognizes numerals written on the skin over the entire body. Senses vibration equally on both sides. Does not mention any subjective alteration of sensation. Does not extinguish to double simultaneous stimulation.

Reflexes

Medium brisk biceps, triceps, radial, ulnar, patella and ankle jerks on both sides. No Hoffmann, Trömner, Babinski, Chaddock, Gordon and Oppenheim signs. Bilaterally equal, medium brisk abdominal skin reflexes. No palmomental, grasping, sucking and other pathological reflexes.

Coordination

Stands straight in Romberg position. Does not deviate at Bárány test and at blind walking. Tandem gait is normal. The finger-nose and heel-shin tests are performed accurately. No rebound or dysdiadochokinesis.

Autonomic functions

Normal sudo- and vasomotor activity. The sphincters are reported to function properly.

Mental state:

The patient is fully alert, accurately recalls his/her personal data, oriented in space and time.

**Summary:**

[*mention the abnormal findings from the neurological status*]

**Laboratory and radiological examinations and consultations**

**2019.09.09. Native cranial CT and CT Angiography:**

No fresh ischemic lesion, no bleeding, no big vessel occlusion. Old small lacunar infarcts bilaterally in the hemispheres.

**2019.09.09. Emergent blood test:**

Na: 144 mmol/L; **K: 3.0 (L) mmol/L**; Cl: 106 mmol/L; **Glu: 17.7 (H) mmol/L**; Urea: 5.5 mmol/L; Krea: 71 umol/L; **eGFR: 72 (L) mL/p/1.73m2**, CK: 74 U/L; GOT: 16 U/L; LDH: 210 U/L; **FVS: 12.04 (H) G/L**; VVT: 4.56 T/L; HGB: 125 g/L; HTC: 0.38; MCV: 83.3 fL; MCH: 27.4 pg; THR: 288 giga/L; CRP: 0.95 mg/L.

**2019.09.10. Cranial CT control:**

No fresh ischemic lesion, no bleeding.

**2019.09.10. Chest X-Ray:**

The heart is not enlarged. No pathological was seen in the lungs.

**2019.09.10. Carotid Doppler Ultrasound:**

Right carotid artery: Internal carotid artery kinking. Echogenic plaque at the beginning of the right internal carotid artery causing 10% stenosis.

Left carotid artery: Echogenic plaque seen at the carotid bifurcation, causing 10% stenosis.

**2019.09.10. Chromatography:**

**HbA1C 8,5% (H)**

**2019.09.11. Echocardiography:**

Left atrium size is within normal range. No ventricle wall moving disorder. EF 58%. No cardiac emboli source could be detected with TTE examination.

**Follow up:**

[*At least for 4 days! Here I mentioned only 1 day for example:*]

**2019.09.10.:** Blood pressure: 130/85 mmHg, pulse rate: 67/min. No fever. No signs of deep vein thrombosis. The abdomen is soft and palpable. The patient is alert, there’s no neurological sign. Control cranial CT didn’t show ischemic lesion or bleeding. Blood glucose levels are elevated, diabetologist consultation was performed who suggested therapeutic changes and occasional insulin treatment.

**Diagnosis:**

Hypertension

Diabetes mellitus

Insufficient circulation in the territory of the vertebrobasilar artery.

**Therapy:** [*ALL the medications with dosage what was given at the hospital. Check the green chart!*]

Intravenous thrombolysis with Actilyse (alteplase) 7 mg in bolus and 70 mg in perfusor within 1 hour. From 09.10., 100 mg aspirin (acetylsalicylic acid) daily.

5/1,25 mg Coverex AS (perindopril + indapamid) in the morning, 5 mg Normodipine (amlodipine) in the evening, 2x1000 mg metformin, 60 mg Diaprel MR in the morning.

**Summary**

[*sum up the anamnesis, the present complaints, the status, the examinations and the treatment*]

67 years old male patient has hypertension and diabetes mellitus in the anamnesis. He was referred by the Emergency Department as a candidate for thrombolysis having sudden onset of double vision and numbness on the right side of the body lasting from 2 hours. Urgent native cranial CT+CTA didn’t show any fresh ischemic lesion, bleeding or big vessel occlusion. There was no contraindication for the intravenous thrombolysis. The patient symptoms improved and by the next day, he became symptom free. There was no fresh ischemic lesion or bleeding in the control cranial CT the next day. Routine vascular checkup did not show any remarkable abnormality. Because of high blood glucose levels and HbA1C, consultation was done with diabetologist who gave therapeutic advice. The patient was emitted symptom-free with suggested cardiologic examination and therapeutic and dietetic advices.