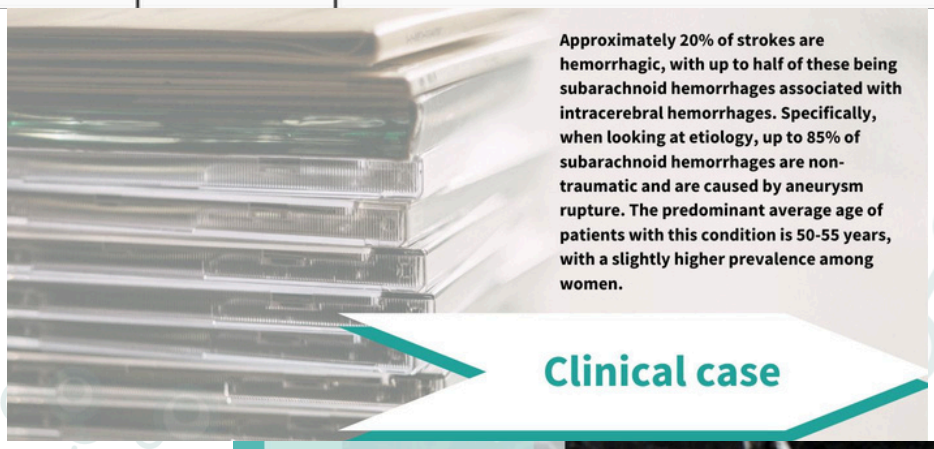
July 2024

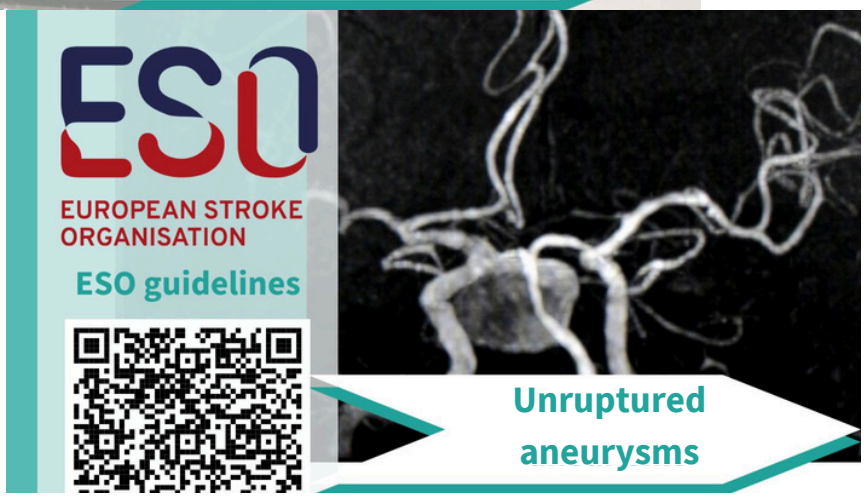
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

DIGEST



Approximately 20% of strokes are hemorrhagic, with up to half of these being subarachnoid hemorrhages associated with intracerebral hemorrhages. Specifically, when looking at etiology, up to 85% of subarachnoid hemorrhages are non-traumatic and are caused by aneurysm rupture. The predominant average age of patients with this condition is 50-55 years, with a slightly higher prevalence among women.

Clinical case



Unruptured aneurysms

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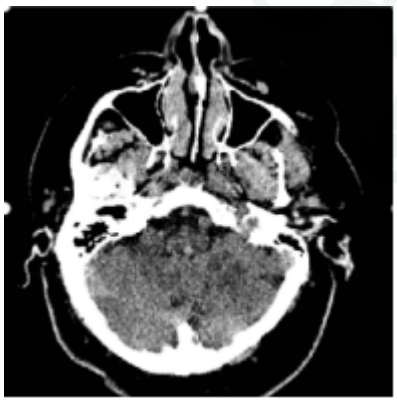
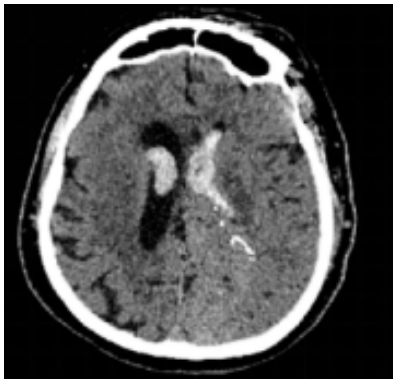
Clinical case

We would like to share with you two clinical cases encountered in the practice of our colleagues, as they illustrate the variability in the severity of clinical manifestations, which often may not correlate with the seriousness of the condition.



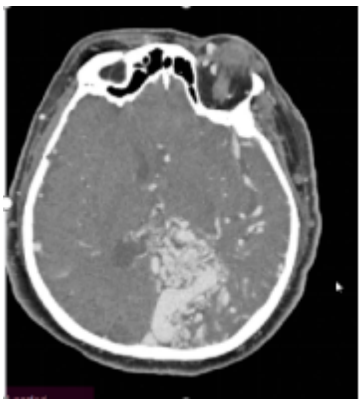


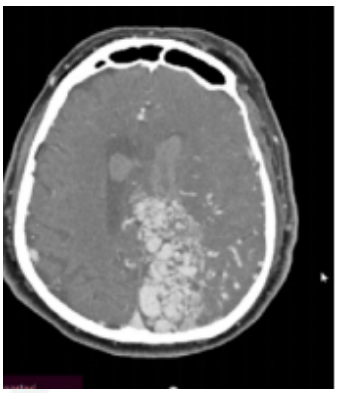
So, the first patient presented with complaints of a two-day headache, which worsened on the day of the visit. Her condition deteriorated with a rise in blood pressure to 180/100 mmHg, accompanied by nausea and vomiting, prompting her to seek medical attention. She mentioned that she had not experienced headaches before.

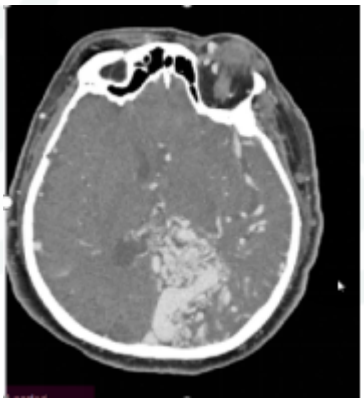
Upon examination, the patient was conscious, communicative, and oriented. A moderate horizontal nystagmus and weakened convergence on the left side were noted. No other abnormalities were detected during the examination.

CT and CT angiography revealed the following:

Subarachnoid hemorrhage with intraventricular bleeding. Cerebral microangiopathy. Arteriovenous malformation in the left parieto-occipital region (territory of the left posterior cerebral artery). Saccular aneurysm of the left posterior cerebral artery at the P1 segment. Fusiform aneurysm of the left anterior cerebral artery extending to the anterior communicating artery.







Clinical case

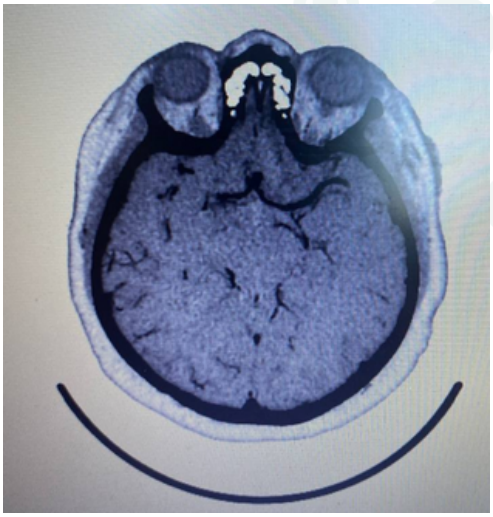
In consultation with neurosurgeons, a decision was made to manage the patient conservatively. The patient's condition remained stable, with no consciousness disturbances, the appearance of new symptoms, or worsening neurological signs. She received antihypertensive therapy to maintain systolic blood pressure below 140 mmHg, as well as nimodipine and acetaminophen.
After a few days of conservative treatment in the hospital, while in a stable condition without significant clinical symptoms or consciousness disturbances, the patient passed away in her sleep.

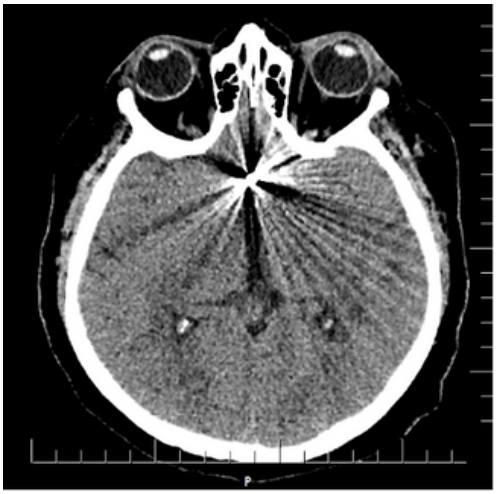
The second patient presented with complaints of a severe headache, accompanied by a rise in blood pressure to 170/90 mmHg. She reported no other symptoms.
Upon examination, a positive Babinski sign was noted on both sides, along with neck stiffness and a positive Kernig sign on both sides.

We extend our thanks for the clinical case information provided by our colleagues, Khrystyna Likar ("Pavlusenko Hospital No. 2 ", Zhytomyr) and Ruslan Salnikov (Feofaniya Clinical Hospital, Kyiv).

CT of the brain upon admission showed a hemorrhage in the basal regions of the left frontal lobe, measuring 40×10×18 mm, with perifocal edema up to 8 mm. Hemorrhagic content was present in the subarachnoid spaces over both frontal lobes, along the falx cerebri, and in the cisterns (pontine, interpeduncular, chiasmatic, and carotid). Hemorrhagic content was also noted in the fourth and third ventricles.

A decision was made to perform aneurysm exclusion. The exclusion of the arteriovenous malformation (AVM) was carried out using a Cosmos 5-22 mm microcoil.





At the anatomical location of the anterior communicating artery, a metal coil is present, causing artifacts.

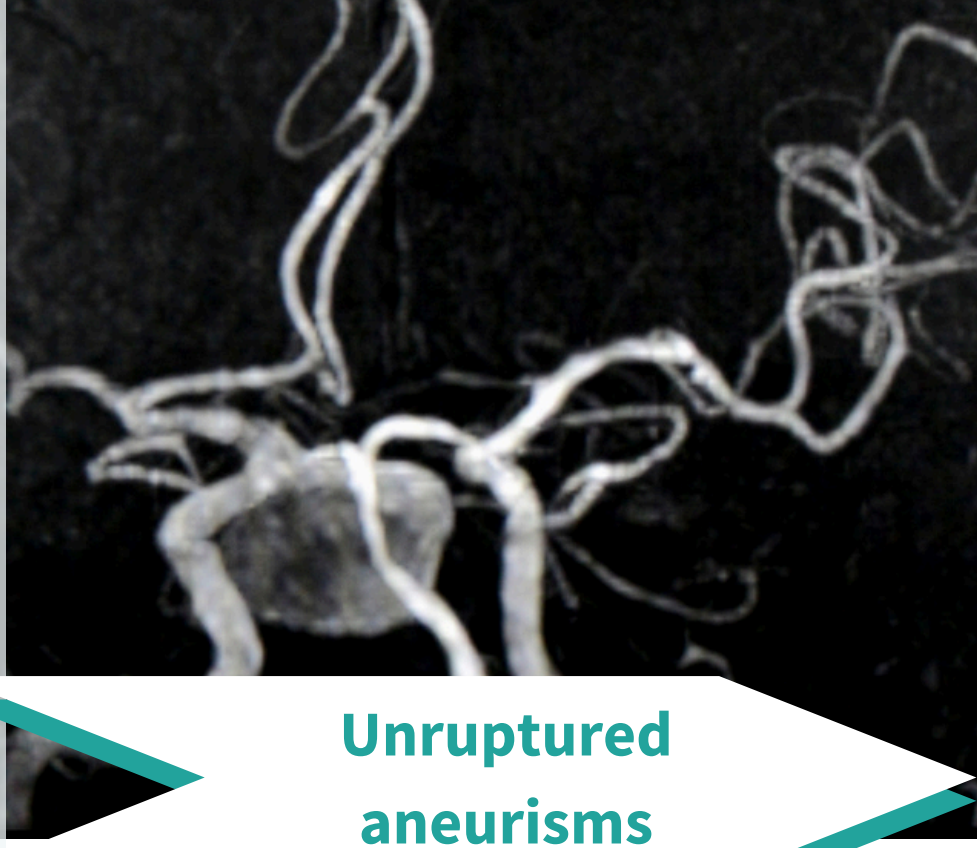
In the anterior basal regions of the left frontal lobe, there is a hemorrhage measuring 30×14×10 mm (previously 40×10×18 mm), with perifocal edema up to 6 mm. Residual hemorrhage is observed in the subarachnoid spaces over the left frontal lobe and along the falx cerebri. Hemorrhagic content is also present in the fourth and third ventricles.

The brain ventricles are not enlarged. Midline structures are not displaced. The cerebellar tonsils are normally positioned.

The patient was discharged with recommendations for further treatment and follow-up examinations as planned for monitoring.

EUROPEAN STROKE ORGANISATION

ESO guidelines



Unruptured aneurisms

Intracranial aneurysms without rupture (IA) occur in approximately 3% of the population. For these patients, the question of whether to perform preventive occlusion remains a relevant consideration.

If so, how and when? When is further imaging needed, and what approaches can be used to reduce the risk of rupture if a conservative strategy is chosen?

ESO has developed standard operating procedures based on interim analyses of studies, meta-analyses, and observational research to provide recommendations for managing patients with unruptured intracranial aneurysms. All recommendations were based on very low evidence.

If the 5-year risk of rupture exceeds the threshold for preventive treatment, according to these recommendations, preventive occlusion should be considered.

The guidelines do not specify the advantages of endovascular treatment over microsurgical approaches, but flow diverters can be considered when there are no other low-risk options for treating such aneurysms.

After aneurysm occlusion, we recommend radiological monitoring over time to check for possible enlargement of the aneurysm.

Additionally, patients are advised to avoid smoking, manage blood pressure, but the use of statins and aspirin is not included in the recommendations for preventing aneurysm rupture risk.

joint meeting

Lviv

LVIV

13-14 September 2024

ESO TF4UKR

RIVNE

14-18 October 2024

Rivne

UkrYSPSchool

USMS