

analysis. We also review ultrasonographic patterns and haemodynamic flow changes of these patients that allowed to establish a suspected diagnosis of vascular dissection.

Results: Carotid and vertebral dissections were present in 32 patients (1,4%). The classical triad of clinical symptoms (Horner, neck pain, focal deficit) was observed in less than 40 % of these patients. Hypertension was found in 20 %, diabetes in 10%, and hypercholesterolemia in 20%. Twenty-one patients had a diagnosis compatible with vascular dissection in duplex ultrasonography. Seventeen patients had a flow pattern of high resistance that was also demonstrated in continuous Doppler. Three patients had a reduction of vascular lumen and one an intimal flap, only seen in duplex. At 3 month follow-up, twelve patients had a resolution of the high resistance flow that correlated with vascular recanalisation demonstrated by AngioMR or AngioCT.

Conclusions: A high-resistance pattern is the most frequent in our review. The simple finding of high resistance flow in continuous Doppler could allow to establish the diagnosis with a specificity as high as duplex.

(P11)Carotid dissection in a neonate diagnosed by ultrasound

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Background: Carotid dissection is an increasingly recognised cause of ischaemic stroke, particularly in adolescents and young adults, being cervical trauma a main cause. This can also occur in young children and even in neonates associated with traumatic deliveries.

Case Report: We present a case of newborn male that 8 hours after delivery by caesarean with forceps presented focal seizures on right side controlled with Phenobarbital. Her workup included a CT-Scan that showed ischaemic infarction on the left hemisphere involving MCA and PCA. Child was received in our laboratory for evaluation on the 10th day of live. Carotid ultrasonography showed a typical image of dissection on the left internal carotid and TCCD identified compensatory flow through the circle of Willis. Angio-MR performed later confirmed the aspects identified by ultrasound showing also a common origin of MCA and PCA.

Ultrasound follow-up performed two month latter showed recanalisation of the left ICA.

Discussion: Carotid Ultrasound is not a standard tool for evaluation of young children due to difficulties in performing the examination and its interpretation. In our case, study performed on the 10th day of life established

the diagnosis, latter confirmed by Angio-MR.

Conclusion: Forceps instrumentation is a possible cause of carotid dissection and this case shows that ultrasound may be a feasible and accurate tool even in very young children, if performed by experienced examiners.

This is also one of the younger cases of carotid dissection diagnosed by ultrasound.

(P12)Indirect finding in CVT patients by extracranial and intracranial venous examination

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Cerebral vein thrombosis (CVT) is a diagnostic challenge in the evaluation of new onset neurological symptoms, mainly in patients presenting with not specific headache alone and non contrast brain CT examination do not often helps to exclude this suspicion and D-dimers is not diriment, unlike what is well known and accepted for deep vein thrombosis in the legs and pulmonary embolism. Neurosonology may help in the evaluation of these patients but the diagnostic role of TCCS in this condition is not well established, being its main application in the follow-up of CVT patients.

We propose that in patients with unilateral sinus thrombosis, involving the sigmoid-transverse segment, the neurosonological examination of jugular axis in the extracranial portion can help to confirm the CVT suspicion, showing indirect signs of intracranial venous hemodynamic compromise. Two experienced neurosonologists, blinded to clinical and neuroradiological data, examined 7 patients in the last 12 months with MRI documented unilateral sinus thrombosis within 48 hours from symptom onset with a multifrequency ultrasound probe in the range 5-11 MHz. The entire course of internal jugular vein (IJV) was examined until the brachiocephalic or subclavian junction and the indirect sign found were:

- 1.A clear dimensional asymmetry of IJV between the two sides
- 2.A flow spectrum demodulation with lesser respiratory variability in one side
- 3.HITS

In all cases both disease and sided defined by the neurosonologist were the same as showed by neuroradiological techniques. In the follow-up these indirect signs disappear in patients with an efficient sinus recanalization.