PATIENTS WITH UNRUPTURED BRAIN ARTERIOVENOUS MALFORMATIONS: A REPORT FROM UNIVERSITY MEDICAL CENTRE LJUBLJANA

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BACKGROUND: The ARUBA trial showed that conservative management is superior to interventional therapy in patients with unruptured brain arteriovenous malformations (uAVM). Our aim was to review the clinical outcome of patients with uAVM treated at our department. METHODS: We retrospectively reviewed the patients with uAVM managed either by interventional therapy (IT) or conservative management (CM) from 2009 to 2014. We analysed the rate of strokes and clinical outcome.

RESULTS: 24 patients were enrolled (54.2% male, age at diagnosis 36.4 ± 15.6 years). There were 3 Spetzler–Martin grade I, 6 grade II, 9 grade III, 4 grade IV and 2 grade V. Sixteen patients were treated by IT (14 by embolization alone, 2 by embolization and surgery). 87.5% of CM and 50% of IT patients had Spetzler-Martin grade ≥ III. The mean follow-up time was 25.0 ± 18.4 months. Complete AVM obliteration at follow-up was achieved in 68.8% of IT patients. Procedure-related stroke occurred in 68.8% of IT patients, with no further strokes during follow-up. CM patients had no strokes during follow-up. Unfavourable outcome (mRS≥ 2) at follow-up was observed in one IT (6.3%) and none of the CM patients. CONCLUSIONS: The results of our study indicate good clinical outcome at mean follow-up of 25 months in both groups. Nevertheless, the majority of IT patients suffered a procedure-related stroke, which temporarily lowered their quality of life. In conclusion, CM may represent a more favourable option than IT in patients with unruptured brain AVM, but the longer follow-up is necessary.