Dokumenttyp: journal article

Autor(en) des Beitrags: Henkes, H; Miloslavski, E; Lowens, S; Reinartz, J; Liebig, T; Kühne, D

Titel des Beitrags: Treatment of intracranial atherosclerotic stenoses with balloon dilatation and self-expanding stent deployment (WingSpan).

Abstract: The endovascular treatment of atherosclerotic intracranial arterial stenoses has previously been based on balloon dilatation or the deployment of a balloon expandable stent. Both methods have advantages (balloon: flexibility; balloon expandable stent: high radial force) and drawbacks (balloon: risk of elastic recoil and dissection; balloon expandable stent: limited flexibility, risk of injury to the vessel due to excessive straightening, overexpansion at ends of stent). A new combination of balloon dilatation, followed by the deployment of a self-expanding microstent has been applied in 15 patients with atherosclerotic arterial stenoses, symptomatic despite medical treatment. An anatomically and clinically adequate result was achieved in all patients. The initial degree of stenosis was 72% (mean). Balloon dilatation resulted in an average residual stenosis of 54% (mean), reduced further to a mean of 38% after stent deployment. Arterial dissection, occlusion of the target artery or symptomatic distal emboli was not encountered. In one patient, a side branch occlusion occurred after dilatation of a M1 stenosis, with complete neurological recovery. All patients were either stable or improved 4 weeks after the treatment. Recurrent TIA did not occur in any patient. Balloon dilatation and subsequent deployment of a self-expandable stent for the treatment
of symptomatic intracranial arterial stenoses combines the advantages of both techniques and allows a rapid, clinically effective and technically safe treatment of these frequently challenging lesions.