

OP42 LONG-TERM COMPARISON BETWEEN AUTOTRANSPLANTED TEETH WITH DEVELOPING ROOTS VERSUS TEETH WITH COMPLETELY FORMED ROOTS

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AIMS: To assess the success and survival rates of autotransplants with developing roots versus teeth with completely formed roots

MATERIALS AND METHOD: Three hundred and seventy nine transplants, evaluated 1 to 11 years after transplantation. The surgery was performed between 2004 and 2014 at the interdisciplinary clinic Proclin in Rotterdam. Four groups were used, based on root development and observation time. Groups 1 and 2 had an average observation time of 36 months, group 3 and 4 had an observation time of 90 months. Group 1: 130 developing teeth one to five years after transplantation; Group 2: 87 completely formed roots one to five years after surgery; Group 3: 50 developing teeth five tot eleven years after surgery; Group 4: 18 completely formed roots five to eleven years after transplantation. The survival and success rates were assessed. The criteria for the succes were the absence of: any form of root resorption, including ankylosis or endodontic treatment in teeth with developing roots. Endodontic treatment was performed before transplantation in all transplants with completely formed roots.

RESULTS: The survival rates were: group 1 100 per cent, group 2 98 per cent, group 3 98 per cent and, group 4 94 per cent. The success rates were: group 1, 96 per cent, group 2, 97 per cent, group 3, 80 per cent and group 4, 83 per cent. The following complications were seen: external root resorption: group 1, 3 (2%), group 2 1 (1%), group 3, 3 (6%), group 4, 2 (11%); endodontic treatment: group 1, 2 (2%), group 2, 6 (12%); failures (loss of the transplant): group 1, 0 (0%), group 2, 2 (2%), group 3, 1 (2%), group 4 1 (6%).

CONCLUSION: In the evaluated group of patients, survival and success rates of autotransplants with completely formed roots are similar to the rates of autotransplants with developing roots in the long-term perspective. Autotransplantation can be performed with developing roots as well as completely formed roots. If possible, transplantation is an even more predictable treatment than dental implants.