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Patient-Specific Complex Hip Arthroplasty Using CT-Guided Symbios HIP-PLAN® Femoral Stems: A Decade of Functional Recovery and Limb Length Restoration

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Background: Anatomical variation in the proximal femur, due to dysplasia, Perthes disease, congenital maldevelopment, or trauma, presents significant challenges in total hip arthroplasty (THA). Standard implants may compromise biomechanics, fixation, or limb length restoration. Custom-made femoral stems designed with HIP-PLAN® 3D planning software and CT imaging offer a patient-specific solution that may improve reconstruction accuracy and long-term outcomes.

Methods: A retrospective review was conducted of 16 patients undergoing THA with Symbios custom uncemented femoral stems. Implant design was guided by HIP-PLAN® software, enabling three-dimensional planning of implant size, orientation, and bone-implant interface. Mean follow-up was 9.6 years (range 0.1–17.0). Etiologies included developmental dysplasia (43.8%), Perthes disease (25.0%), congenital maldevelopment (18.8%), and trauma (12.5%). Functional outcomes were measured using the Oxford Hip Score and UCLA Activity Score. Radiographic limb length discrepancy (LLD) was assessed pre- and postoperatively.

Results: Oxford Hip Scores improved from 6.4 preoperatively to 38.6 postoperatively (mean gain 32.2 points), while UCLA Activity Scores increased from 2.4 to 7.1 (mean gain 4.7 points). Preoperative LLD averaged 2.34 cm, reduced to 0.29 cm postoperatively (mean correction 2.05 cm). Seven patients achieved complete equalisation, and 88% had ≤0.3 cm residual discrepancy. No stem revisions, dislocations, or loosening were observed.

Conclusions: Custom-made femoral stems guided by HIP-PLAN® 3D planning enable precise anatomical reconstruction and durable functional recovery in patients with complex femoral morphology. These findings support the role of patient-specific implants in modern hip arthroplasty.

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Incidence of Colorectal Cancer in Patients Presenting with Acute Diverticulitis and Final Patient Outcomes Over a 5-Year Period

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Background: Acute diverticulitis is a common surgical presentation characterised by inflammation of colonic diverticula, which can present with abdominal pain, fever, and raised inflammatory markers. Colorectal cancer (CRC) and diverticulitis share similar risk factors and symptoms, creating diagnostic challenges. This audit aimed to determine the incidence of CRC in patients presenting with acute diverticulitis over a 5-year period, alongside assessing final outcomes and adherence to diagnostic and follow-up guidelines.

Methods: A retrospective study was conducted across a large NHS Trust, including patients with a discharge diagnosis of diverticulitis over a five-year period from 2019 to 2024. Clinical data, imaging, and follow-up outcomes were reviewed using electronic records. The primary outcome was the incidence of CRC and secondary outcomes included follow-up endoscopy rates and final patient outcomes.

Results: A total of 415 patients were included in this audit. CRC was diagnosed in 5 patients (1.2%), all of whom had complicated diverticulitis. CT imaging was performed in 98.5% of patients, confirming its role as the primary diagnostic tool. While 57.1% of patients had follow-up endoscopy booked, only 50.8% underwent endoscopic evaluation. Surgical intervention was required in 15.4% of cases, with Hartmann's procedure being the most common operation. Mortality rate was 8.9%, primarily in older patients with comorbidities.