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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.

Conclusions: The incidence of CRC in this cohort aligns with published data. There was poor correlation between current guidelines and planned endoscopic assessment post discharge which requires re-evaluation of current practice.

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PUPIL-POINT: Offline Smartphone Pupillometry and a 60-Second Neuro-Brief for Field Triage of Traumatic Brain Injury

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Background: In conflict and resource-limited settings, early neurological signs guide triage and transfer, yet formal pupillometry and dependable teleconsultation are rarely available. Most apps require connectivity and controlled lighting. The aim of this study is to develop and test PUPIL-POINT, a low-cost pack combining offline smartphone pupillometry with a structured 60-second neuro-brief for rapid escalation in the first hour after head injury.

Methods: Using human-centred design, we will build: (1) a printable calibration card and clip-on light; (2) an on-device computer-vision workflow estimating pupil size and anisocoria without internet; (3) a one-screen script capturing GCS, pupils, lateralising signs, physiologic targets (SpO_2 >94%, SBP ≥110 mmHg, $EtCO_2$ 35–40 mmHg) and red flags; and (4) an auto-generated neuro-brief compressible for SMS/radio. Content validity came from ATLS/WHO mapping and expert review. Feasibility endpoints were prespecified: capture time ≤60 seconds, consumables <£10, and completion of all fields by novices in simulated low-light drills. PUPIL-POINT runs entirely offline, limits photic artefact with flash-free capture, works on low-spec phones, and outputs a standardised, time-stamped brief aligned with neurosurgical referral expectations.

Conclusions: PUPIL-POINT offers a pragmatic route to better neurotrauma triage "in the trenches," standardising the first minute of neurological assessment and the referral message when connectivity and equipment are limited. We invite partners to pilot and co-evaluate the tool.

*Editorial Note: This article describes a study protocol. The proposed study has not yet been conducted, and therefore no data or results are included.

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Psychosocial-informed Considerations for Surgical Scar Revision in Conflict-related Trauma

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Background: Over the past three years, conflict has increased significantly, with a 66% rise in active war zones. Scars are among its most enduring legacies—etched into the skin, but also into identity. Scar revision surgery aims to return anatomic structure and function to minimise any visible scarring, but for surgeons operating on conflict-related trauma, it requires attention to identity and cultural narratives.

Methods: This paper reviews surgical, psychological, and cultural perspectives on scar revision. Exploring Ricoeur's theory of narrative identity in understanding patient attitudes towards surgical scar revision, it reflects on compounding psychosocial considerations attached as well. Reports and testimonies from surgeons operating in war-affected regions were used to contextualise current surgical frameworks against lived trauma.

Results: Surgical approaches through procedures such as Z-plasty, W-plasty and skin grafting improve percieved functional and aesthetic in up to 89% of patients. However scar revision in conflict-affected regions, particularly children, have more inconsistent results, with Médecins Sans Frontières (MSF) reporting patients remaining withdrawn and isolated post-surgery, requiring intensive therapy. MSF also report that without integrated psychosocial support, surgical revision has exacerbated distress and negative self-identity.

Conclusions: Scar revision in trauma and conflict care cannot be confined to surgical techniques. Optimal outcomes require integrating trauma-informed, multidisciplinary pathways that combine