Background: Both orthopaedic surgery and cast immobilisation are independent risk factors for development of VTE. There are currently no guidelines on appropriate risk stratification or treatment for this cohort of patients. The potentially significant financial cost of prophylaxis has previously not been established.

Aims: To perform an economic analysis to determine the potential costs and benefits of the above treatment.

Methods: Data from one hundred patients who had undergone lower limb immobilisation were prospectively collected using a specially designed proforma. Information included personal demographics, diagnosis and adjusted risk factors for VTE.

A decision tree model from a NHS perspective was used to calculate both cost of prophylaxis and cost of VTE diagnosis, treatment and long-term complications. Incremental cost-effectiveness ratios (ICER) were calculated to provide estimates of the cost per VTE averted, and cost per quality-adjusted life year (QALY) gained with the use of thromboprophylaxis.

Discussion: 46/100 patients with primary lower limb cast immobilisation qualified for prophylaxis. This number of patients would incur a prophylaxis cost of £9113.52, however would save an estimated £3617.44 in direct VTE diagnosis and treatment costs and £19,847.10 in long-term costs. This resulted in a cost per VTE averted of £3338.10 and cost per QALY of £9623.58. There are substantial cost implications in using thromboprophylaxis for cast immobilised patients, however it has been demonstrated that this may be cost effective in the long term. Using a more selective risk stratification tool may reduce direct prophylaxis costs and increase short term cost effectiveness.

SYMPTOMS SUGGESTIVE OF DUMPING SYNDROME AFTER PROVOCATION IN PATIENTS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY

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Background: Dumping syndrome is a well-known complication after upper gastrointestinal (GI) surgery. There are scarce data in the literature about the incidence of dumping after bariatric operations but, certainly no relation between this syndrome and laparoscopic sleeve gastrectomy (LSG) has been attempted.

Methods: We conducted a prospective clinical study in order to evaluate the potential presence, incidence and severity of Dumping syndrome after LSG. Thirty one non-diabetic morbidly obese patients (eight male, 23 female) eligible for LSG were evaluated. Median age was 38 (22–58 years) and mean body mass index (BMI) was 45.55 (±5.37). The diagnosis of dumping syndrome was based on clinical provocation of signs and symptoms using an oral glucose challenge. After this, the Sigstad’s dumping score was estimated in order to separate dumpers from non-dumpers, and the Arts questionnaire was completed to distinguish between early and late dumping.

Results: Levels during the oral glucose challenge were measured. The diagnosis of dumping syndrome was based on clinical provocation. The Sigstad’s dumping score was estimated in order to separate dumpers from non-dumpers, and the Arts questionnaire was completed to distinguish between early and late dumping. Moreover, blood glucose levels during the oral glucose challenge were measured.

Conclusion: A significant proportion of patients after LSG experienced dumping syndrome upon provocation. It seems that LSG should no longer be considered as a pure restrictive procedure, and it might be an option for heavy sweaters by changing their food tolerance patterns.

APPEARANCES CAN BE DECEIVING – GENETIC HETEROGENEITY IN THE COLON OF CANCER PATIENTS

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Background: Distinct histological features physically define a colorectal carcinoma (CRC) and distinguish it from the normal colonic mucosa. Often, however, there are regions adjacent to a carcinoma that deviate from the normal histological appearance and display features of hyperplasia and/or adenoma. It is not certain whether these regions represent precursor lesions or reactive changes. To address this we have characterised a series copy number alterations (CNAs) that typify CRC in the regions adjacent to a carcinoma.

Methods: Micro-dissection molecular copy number counting (μMCC) was used to assay CNAs frequently observed in CRC and those known to contribute to carcino genesis. μMCC employs laser capture micro-dissection to accurately collect DNA from specific histological regions and uses single molecule digital PCR to measure copy number. Four CRC cases were characterised.

Results: In the normal colon we describe genetic heterogeneity and identify CNAs that are known to contribute to tumour formation, namely KRAS amplification. In addition a number of copy number changes are shared by and built on in the hyperplastic, adenomatous and carcinoma samples.

Conclusion: These preliminary data support the model of step-wise cancer progression but importantly suggest that nearby hyperplastic regions may represent precursors rather than reactive changes. These results have implications on our understanding of CRC pathogenesis and practically on the optimal location of resection boundaries in CRC surgery. Further work is now needed to establish how widespread CNAs are in the normal colon and regions adjacent to CRC.

THE QUALITY OF REPORTING IN RANDOMISED CONTROLLED TRIALS IN PLASTIC SURGERY

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Introduction: Randomised controlled trials (RCTs) represent the gold standard in evaluating healthcare interventions. However, RCTs can yield biased results if they lack methodological rigour, especially where surgical techniques are involved. Readers need complete, clear and transparent information. The Consolidated Standards of Reporting Trials (CONSORT) statement for non-pharmaceutical interventions was developed to aid reporting and consists of a 23 essential items.

Aim: To assess the compliance of RCTs in Plastic Surgery with the CONSORT statement.

Method: Medline was searched by an information specialist from 1 January 2009 to 30 June 2011 for the MESH heading “Surgery, Plastic” with limitations for English language, human studies and randomised controlled trials. Results were then manually searched for relevant RCTs involving surgical techniques. These were scored against the 23 item CONSORT checklist. Secondary scoring was then performed and discrepancies resolved by consensus.

Results: 55 papers involving 3,830 patients met the inclusion criteria from a manual search of 254 papers retrieved from Medline. The average CONSORT score was 11.5 out of 23 items (50%, range 5.3–21.0). Compliance was poorest with items related to intervention/comparator details (7%), randomisation implementation (11%) and blinding (26%). There was no link between journal 2010 impact factor and CONSORT score (R = 0.25). Only 60% declared conflicts of interest and 75% had permission from an ethics committee.

Conclusion: The reporting quality of RCTs in Plastic Surgery is poor. Importantly, those aspects central to RCT methodology (randomisation and blinding) were the most poorly reported.

FUNCTIONAL HEALTH STATUS OF PATIENTS AFTER THE FONTAN OPERATION

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Background: The Fontan procedure is a palliative procedure for the single ventricle, existing for about four decades. A retrospective study was made.