this increases surgery time and post-operative stay, and in the longer-term can adversely affect patient outcomes. As part of a program to assess the burden of adhesions in the USA we assessed the short-term additional costs of common laparoscopic gynecological operations including adhesiolysis. METHODS: The Premier database provides detailed hospital cost accounting data from over 500 centers across the USA. A cohort of patients undergoing gynecological laparoscopic surgery between 2004–2006, including ovarian procedures, was selected by ICD9-CM and identified on discharge. Those patients undergoing adhesiolysis secondary to another procedure were also identified. All discharges were classified as inpatient or outpatient. Mean total costs, surgery cost and mean length of stay (LOS) were determined for each procedure and sub-group, with and without adhesiolysis. Regression analyses were undertaken to test for significant differences between procedures, with and without adhesiolysis. RESULTS: A total of 7928 inpatient and 6820 outpatient discharges for laparoscopic ovarian procedures (with total costs) were identified. 36.8% and 33.6% included adhesiolysis. The additional costs of adhesiolysis accounted for an extra 5.3% ($328) and 6.9% ($215) of total costs. Surgical costs accounted for 23.7% ($78) and 27.5% ($59) of additional costs. Both total and surgery costs were significantly higher for the same procedure with adhesiolysis compared to that without (P < 0.0001). The mean LOS for inpatients was significantly longer with adhesiolysis (2.35 d) than without (2.02 d), (P < 0.0001). CONCLUSIONS: This study confirms previous European research that adhesiolysis occurs in approximately one third of ovarian laparoscopic procedures and results in additional hospital costs and longer LOS. While the long-term outcome burden of adhesiolysis has been demonstrated by the SCAR study in Scotland, the impact in the USA needs further exploration.

COMPARING TIME AND SUPPLIES USAGE ASSOCIATED WITH A NEW SKIN CLOSURE DEVICE VS. STANDARD OF CARE WOUND CLOSURE FOR ABDOMINOPLASTY SURGERY IN THE NETHERLANDS

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OBJECTIVES: PRINEO® Skin Closure System (PRINEO) offers effective and safe wound closure compared to conventional suture techniques i.e. Standard of Care (SOC). The aim of this study was to evaluate differences in health resource utilization attributable to PRINEO vs. SOC for abdominoplasty surgery. METHODS: A time and motion study was conducted in one centre in The Netherlands. Trained centre staff collected ten observations (five for PRINEO and five for SOC) following the patient from surgery through post-op care. Data Observation Forms were designed based on information obtained from staff interviews. Surgical wound closure and management activities were observed for which differences in time and resource use between PRINEO and SOC were expected: incision closure time, dressing applications, and dressing changes (during admission and post-discharge return). RESULTS: Average time for skin layer closure was 1.29 min for PRINEO vs. 1.75 min for SOC. Average wound length was 48 cm vs. 49 cm, respectively. This translates into a speed of closure increase from 2.73 cm/min (SOC) to 37.09 cm/min (PRINEO). Average time for wound closure (dermal and skin layer) was 24.85 min with PRINEO compared to 31.83 min for SOC. The SOC treatment arm incurred 2.19 min and 3.07 min for dressing application and post-op dressing changes respectively. PRINEO did not require any dressing. Additionally, use of PRINEO resulted in elimination of suture closure materials which on average included 2.4 strands of Monocryl 2-0 sutures, 5.7 adhesive dressings, 17.4 strips of adhesive tapes, and 9.3 gauze swabs. One PRINEO unit was required. CONCLUSIONS: The use of PRINEO resulted in increased skin closure speed and avoided final skin layer closure and aftercare management of the wound in terms of dressing application and changes. Concomitant to the savings in personnel time was a reduction in surgical supply materials.

CHANGING THE SURGICAL WOUND CLOSURE MANAGEMENT PATHWAY: TIME AND SUPPLIES WITH PRINEO VS. STANDARD OF CARE FOR ABDOMINOPLASTY SURGERY IN GERMANY

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OBJECTIVES: PRINEO® Skin Closure System (PRINEO) offers effective and safe wound closure compared to conventional suture techniques i.e. Standard of Care (SOC). The aim of this study was to evaluate differences in health resource utilization attributable to PRINEO vs. SOC for abdominoplasty surgery. METHODS: A time and motion study was conducted in one centre in Germany. Trained centre staff collected ten observations (five for PRINEO and five for SOC) following the patient from surgery through post op care. Data Observation Forms were designed based on information obtained from staff interviews. Surgical wound closure and management activities were observed for which differences in time and resource use between PRINEO and SOC were expected: incision closure time, dressing applications, and dressing changes (during admission and post-discharge return). RESULTS: Average time for skin layer closure was 2.11 min for PRINEO vs. 13.01 min for SOC. Average wound length was 46.4 cm vs. 52.6 cm, respectively. This translates into a speed of closure of 4.04 cm/min for SOC vs. 21.97 cm/min with PRINEO. Average time for wound closure (dermal and skin layer) was 24.85 min (PRINEO) compared to 34.05 min (SOC). The SOC treatment arm incurred 2.94 min and 4.32 min for dressing application and post-operative dressing changes, respectively. PRINEO did not require any dressing. Additionally, use of PRINEO resulted in elimination of suture closure materials which on average included 2 strands of Monocryl 2-0 sutures, 2 polydioxanone sutures, 13.6 Cosmopor adhesive dressings, 12 strips of adhesive tapes, and 7.4 gauze swabs. One PRINEO unit was required. CONCLUSIONS: The use of PRINEO resulted in increased skin closure speed and avoided post-suture closure and aftercare management of the wound in terms of dressing application and changes. Concomitant to the savings in personnel time was a reduction in surgical supply materials.

HEALTH CARE INTERVENTIONS—Health Care Use & Policy Studies

ORGAN SHORTAGE IN TRANSPLANTATION MEDICINE: WHOSE VALUES AND ON WHAT BASIS SHOULD ORGAN PROCUREMENT BE ORGANISED?

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OBJECTIVES: To reflect various approaches for organ procurement such as altruism, altruism combined with financial
incentives, reciprocity, and indirect/direct financial incentives for organ donation. To elucidate the values and preferences of the public regarding organ procurement systems. METHODS: Concepts and theories of altruism identified in economic literature are applied to transplantation. This theoretical overview has been extended by a comprehensive literature search that identified 48 international surveys and studies which empirically explore public attitudes towards human organ donation and financial incentives for deceased and living organ donation. RESULTS: The identification of a series of alternative approaches of human organ donation reveals that donation based on altruism alone may have become too costly for a community as voluntary donations have remained almost flat during the last decades, while the number of patients on waiting lists have attentively increased. The value of these lost lives seem to be evaluated lower than keeping altruism as the main principle of donating organs. As a consequence some stakeholders have been questioned that altruism is enough to meet increasing demand for organs and propose supplementing the principle of giving by introduction of financial incentives for donors or fully replacing it by pricing mechanism. For a community choosing any of these donation approaches it is especially important not only to be attracted by some appeal any proposal may offer but to further investigate the implicit assumptions and their potential limitations the donation policies are based on. While it is estimated that the debates on the ethics of organ donation are well understood by those involved in organ procurement and donation, the values and preferences of the public regarding organ procurement systems under scientific discussion are not that well known and therefore have to be elucidated. Though, 48 international surveys and studies to investigate public attitudes towards human organ donation and financial incentives for deceased and living organ donation have been identified in a comprehensive literature search, it is revealed that it is unknown whether e.g., the opportunity for trading one’s organ(s) is determined by community values. CONCLUSIONS: Transplant decision-makers should rather than imposing their values to the community, instead should answer to community values. It is necessary to identify the community preferences and values with respect to the organ procurement proposals and prepare on this informed basis an adequate donation policy which is in line with community values. The process of consulting the community may reveal that individuals are altruistically motivated and would donate their organs after death, and that all is missing is mutual trust. An informed ethical debate and dialogue between members of the transplant expert community and the public is needed to decide which organ procurement approach best reflect the communities shared values.

MUSCULAR-SKELETAL DISORDERS—Clinical Outcomes Studies

PMS1

COGNITIVE IMPAIRMENT IN PATIENTS WITH FIBROMYALGIA SYNDROME AS ASSESSED BY THE MINIMENTAL STATE EXAMINATION

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OBJECTIVES: Fibromyalgia syndrome (FMS) is a painful condition which deteriorates patient’s functioning and might impair cognitive function. The goal of this analysis was to screen cognitive function of patients with FMS. METHODS: We surveyed consecutive patients with a diagnosis of FMS according to ACR criteria. Cognitive function was screened with the MiniMental State Examination (MMSE). Medical history, level of pain (Short Form-McGill Pain Questionnaire) and symptoms of depression and anxiety (Raskin and COVI scales, respectively) were also recorded. MMSE scoring was adjusted by age, sex, pain intensity and COVI and Raskin scoring by linear regression modeling. RESULTS: Forty-six patients [mean ± SD; 50.8 ± 10.1 years old (90.9% female)] with FMS were enrolled in the study. Patients had FMS for 1.9 ± 2.6 years. Most patients (60.3%) complained of severe pain (above 70) with a mean present pain intensity of 2.6 ± 1.0 (range 0–5) and a mean last-week average pain of 70.8 ± 16.0 mm (range: 0–100). Painful FMS subject’s average unadjusted MMSE score was 26.7 ± 3.1 pts, with 15.2% of patients with a scoring ≤24 pts (possible cognitive deficit). After adjusting, average MMSE scoring was 26.7 ± 1.2 pts, with 5.1% of subjects scoring ≤24 pts, which is considerable higher than in sex and age matched general population (0.05%). Frequency of possible cognitive deficit was independent of concomitant medications, pain severity, age and sex. In the bivariate analysis, frequency of subjects with depressive or anxiety symptoms (as ranked by RASKIN and COVI scales, respectively) were numerically higher in patients with MMSE ≤24, but statistically not significant (p = 0.235 and 0.225, respectively). CONCLUSIONS: Cognitive impairment as assessed by the MMSE may be a meaningful clinically finding in patients with Fibromyalgia. Further investigation in large samples of FMS patients should be carried out to explore to what extent cognitive function is impaired in these subjects.

PMS2

DIAGNOSIS OF OSTEOPOROSIS BY DUAL X-RAY AND LASER (DXL) DENSITOMETRY—A HEALTH TECHNOLOGY ASSESSMENT

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OBJECTIVES: Although cDXA is considered the gold standard for diagnosis of osteoporosis, it requires massive and radiation-protection-intensive radiological settings. Peripheral DXA measurements would be more practically convenient but their results do not correlate very well with that of cDXA. Against this background, DXL was developed. It combines peripheral DXA measurement with a laser-defined region of interest to correct for artefacts. In order to clarify the diagnostic accuracy and hereby the clinical utility, a literature overview was undertaken.

METHODS: The systematic literature search covered Medline, Embase (including Embase Alert) and the Cochrane Library. Diagnostic studies comparing the diagnostic accuracy of DXL against cDXA were identified and their methodological qualities assessed using the QUADAS instrument. Furthermore abstract publications were included if they contained sufficient data. It was planned to calculate pooled estimates of diagnostic accuracy parameters on the condition that the studies yielded sufficiently high quality data. RESULTS: Six published trials and two meeting abstracts were appraised. Owing to diversity in the study subjects’ origins, variable risk factor constellations and the inhomogeneity of the reference method (i.e. cDXA model, measurement site, execution procedures and reference population) employed in the studies, we decided on not performing meta-analysis. One abstract publication was invalid for calculating diagnostic accuracy statistics due to data inconsistency. The ranges of sensitivities (54.6%–100.0%), specificities (64.3%–86.0%), positive predictive values (33%–82%), negative predictive values (73%–100%), positive likelihood ratios (2.20–6.25), negative likelihood ratios (0.00–0.34) and diagnostic odds ratios