PIH7

BODY COMPOSITION CHANGES IN THE PREOPERATIVE PERIOD AND AFTER SURGERY

Hock M, Domány B, Garai J, Kránicz J, Kriszbacher I, Boncz I, Bódis J
University of Pécs, Pécs, Hungary

OBJECTIVES: Our aim was to examine the changes of body composition in the perioperative period. **METHODS:** The authors examine the body composition of 11 postmenopausal women (Total Body Water (TBW), Extracellular Water (EW), Intracellular Water (IW), Fat Mass (FM), Fat Free Mass (FFM)) 1month and 1 day before as well as 1day and 1 month after the operation. The performed operations were anterior colporrhaphy with or without posterior colporrhaphy or enterocele repair. Preoperative medical preparation ordered the use of oral (1 mg estriol/die; T. Ovestin) and local (U. Ovestin; 1 mg/g estriol) estrogen for a month. Fluid replacement was adequate as ordered for patients with first-degree severity (average operative load, prohibition of fluid intake is not longer than 6–12 hours, maximum blood loss is 250–500 ml) during the operation and in the postoperative period. Body composition parameters were measured by MF HUMAN—IM SCAN Master 1.0. The statistical data were calculated according to mean, standard deviation, median, range, Fisher's exact test, Student's t-test methods and the results were considered to be significant at $P < 0,05$. **RESULTS:** The mean age of the subjects was 59.4 years (8.58 SD, median 57 years, range 48–72 years), the average number of preceding pregnancies was 3.33 (1.68 SD) with 2,46 deliveries (1.46 SD). In the preoperative period (between the 1st and the 2nd measurements) a significant decrease (p = 0,056) was found in EW. In comparison of the 2nd and the 3rd measurements a significant decrease (ECW p = 0,027; TBW p = 0,04; FM p = 0,019; FFM p = 0,019) was observed except for the parameters of ICW (p = 0,15). Between the 1st and 30th day after the surgery changes in findings were not significant (ECW p = 0,81; TBW p = 0,83; FM p = 0,5; FFM p = 0,3; ICW p = 0,616). **CONCLUSIONS:** The results suggest that body composition changes in the perioperative period should be followed.

PIH8

CHANGES IN PELVIC FLOOR MUSCLE FUNCTION DURING THE PERIOPERATIVE PERIOD OF COLPORRHAPHY

Hock M, Domány B, Rácz S, Garai J, Kránicz J, Kriszbacher I, Boncz I, Bódis J
University of Pécs, Pécs, Hungary

OBJECTIVES: Our goal was to follow up the changes of pelvic muscle function during the perioperative period. **METHODS:** Fifteen women in postmenopausal period were included in the study. The surgical management included anterior colporrhaphy with or without posterior colporraphy or enterocele repair. Preoperative medical preparation ordered the use of oral (1 mg estriol/die; T. Ovestin) and local (U. Ovestin; 1 mg/g estriol) estrogen for a month. The mean age of the subjects was 59.4 years (8.58 SD, median 57 years, ranging from 48 to 72 years), the average number of preceding pregnancies was 3.33 (1.68 SD) with 2,46 deliveries (1.46 SD). The pelvic muscle function was measured 1 month before (at the beginning of the preoperative preparation), 1 day before and 1 month after the operation. The following factors were measured: pelvic floor muscle activity, ability to relax and differences between left and right sides. The measurement of muscle parameters was performed by intravaginal surface EMG equipment. The statistical data were calculated according to mean, standard deviation, median, range, Fisher's exact test, Student's t-test methods and the results were considered to be significant at $P < 0.05$. **RESULTS:** In the preoperative period (from the 1st to the 2nd measurement) a significant recovery (p = 0.03) was found in the ability to relax pelvic floor muscle. In comparison of the 2nd and the 3rd measurement a significant decrease occurred in the average muscle activity (p = 0.054) and on the left (p = 0.034) side. The difference in the results of the 1st and the 3rd measurement was even more significant (p = 0.005), there was a 20.8% average muscle activity decrease during this period. **CONCLUSIONS:** The results suggest to follow up the function of pelvic floor muscles in the perioperative period of colporrhaphy, and if it is necessary to begin the proper physiotherapeutic treatment.

INDIVIDUAL'S HEALTH – Cost Studies

PIH9

COST COMPARISON OF MIDWIFE-LED VERSUS OTHER MODELS OF CARE FOR CHILDBEARING WOMEN FROM THE PRIVATE PAYER PERSPECTIVE IN BRAZIL

Takemoto ML, Fernandes RA, Passos RB, Cukier FN, Tolentino ACM
ANOVA—Knowledge Translation, Rio de Janeiro, Rio de Janeiro, Brazil

OBJECTIVES: Efficacy of midwife-led models of care (MLMC) has been already assessed in a Cochrane systematic review (Hatem 2008) but there is a lack of cost comparisons in Brazil. This study aims to compare costs and consequences of MLMC versus other models of care (OMC) for women with low or mixed risk of complications from the private payer perspective. **METHODS:** Efficacy data was obtained from Hatem 2008 which compared MLMC with OMC including models centered in obstetricians, family doctors or shared models. As major maternal and neonatal events had not shown statistically significant differences between groups, efficacy of both models was considered similar. Significant differences in favor of MLMC (analgesia, episiotomy, instrumental birth, etc.) were used only for cost estimation. Resource use was obtained through local published data and input from clinical experts. Only direct medical costs related to the delivery room setting were considered. Unit costs were obtained from Brazilian official sources. **RESULTS:** Risk Ratios for regional analgesia (RR = 0.81) and episiotomy (RR = 0.82) were selected as important for the adopted setting. The current episiotomy rates in Brazil varied from 76.20% to 94.50% due to differences between studies and regional analgesia rate was 99.40% in the only identified study. The incremental estimated costs for one additional episiotomy and analgesia were 42.82 BRL and 359.95 BRL, respectively. For each 1000 deliveries in the private setting, 137 to 170 episiotomies and 179 analgesias would be prevented with the adoption of MLMC, resulting in cost savings of 70,274 to 71,685 BRL. **CONCLUSIONS:** MLMC has shown similar efficacy and safety profiles when compared with OMC and our findings indicated potential cost savings with MLMC in the Brazilian private system. Further researches including other clinical outcomes, longer follow-up and complications as results of medical interventions could result in higher savings for the private payer.

PIH10

TREATMENT AND COST FOR PATIENTS WITH ENDOMETRIOSIS IN THE UNITED KINGDOM

Wasiak R[1], Manson S[1], Ryan J[2], Petri JC[3]
[1]United BioSource Corporation, London, UK; [2]Bayer Schering Pharma AG, Newbury, UK; [3]Bayer Schering Pharma AG, Berlin, Germany

OBJECTIVES: Endometriosis is defined by the growth of endometrial tissue outside the uterine cavity. It is a common and debilitating benign gynecological condition affecting mainly reproductive-age women with prevalence estimated between 7%–10% of women. The purpose of this study was to understand the cost associated with endometriosis in a secondary care setting in the UK. **METHODS:** A retrospective analysis was performed using secondary care data from the Cardiff and Vale National Health Service Hospitals Trust including 411 patients diagnosed with endometriosis. a supplementary postal survey was completed by a subset of 80 patients. Data included information on hospital stays, surgical procedures, prescriptions, as well as survey data on primary care treatment, quality of life and productivity loss. Patients were classified into surgical or clinical diagnosis groups depending on type of diagnosis: laparoscopy/laparotomy, or clinician's assessment only. **RESULTS:** For hospital visits with endometriosis as primary diagnosis, patients with a surgical diagnosis (n = 89) experienced an average hospital stay duration of 0.4 days (SD = 0.7) compared to 2.2 days (SD = 3.4) for patients with a clinical diagnosis (n = 322). The average cost per hospital visit was £871 (surgical group) and £1525 (clinical group). Patients with clinical diagnosis also had more GP visits in the 6 weeks prior to their hospital visit (mean 2.0 (SD = 2.9) vs. 1.4 (SD = 1.4)). The most common endometriosis-specific pharmacotherapy used in a secondary setting was GnRH agonists (22%) followed by progestins (11%) and oral contraceptives (10%) with drug use in the surgical group exceeding that of the clinical group. Patient utility as measured by the EQ-5D was similar for surgically and clinically diagnosed patients (0.70, SD = 0.32 vs. 0.71, SD = 0.27). **CONCLUSIONS:** This study demonstrates that there are substantial costs involved in treating patients in a secondary care setting, with a different pattern of endometriosis-related costs for patients without a confirmed diagnosis of endometriosis.

PIH11

SOCIETAL IMPACT OF DIARRHEA IN YOUNG CHILDREN IN THE NETHERLANDS

Wolleswinkel J[1], Speets A[1], Hovels AM[2]
[1]Pallas, Health Research and Consultancy, Rotterdam, The Netherlands; [2]GSK, Zeist, The Netherlands

OBJECTIVES: Diarrhoea is one of the most common childhood diseases. This study examined the medical resources use and societal impact related to diarrhoea in young children in the The Netherlands. **METHODS:** In 2007 an Internet survey questionnaire on childhood diseases was administered to a representative sample of parents with children aged <5 years. The survey covered socio-demographic data, characteristics of the most recent disease episode, medical resources use, productivity loss by the caregivers, and travel-related costs. Data were available for 2425 respondents. This study focused on diarrhoea episodes. Diarrhoea was defined as symptoms and/or diagnosis of diarrhoea only or diarrhoea in combination with symptoms of fever and/or vomiting; i.e. diarrhoea without concomitant diseases. **RESULTS:** In total 128 episodes of diarrhoea were reported. In 27% of these episodes a general practitioner had been consulted, in 2% a paediatrician, and in 4% an emergency department had been visited. In 59% of the diarrhoea episodes no medical doctor was consulted. Hospital admission occurred in 3% of the cases (mean duration 2 days). Over-the-counter drugs were bought in 41% of the episodes. In 17% of the diarrhoea episodes caregivers lost days from a paid job (mean 16.4 hours per episode; SD 15.8). In 19% of the episodes parents reported productivity loss at work during their child's illness (mean 6.3 hours per episode; SD 5.9). Leisure time loss was reported in 29% of the episodes (mean 2.3 hours per episode; SD 2.5). The mean costs were estimated to be €208,- per diarrhoea episode, of which 23.3% direct medical costs, 10.3% direct non-medical, and 66.4% indirect non-medical costs. **CONCLUSIONS:** The medical and economic burden of diarrhoea is considerable to individual families as well as to society in the The Netherlands. This study has filled a gap in the knowledge base on the impact of diarrhoea on society.