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OBJECTIVES: The first objective was to assess the two-year changes in quality of life after gastric bypass in patients with severe obesity. Second, we analysed the effect of weight reduction on the different HRQL dimensions in the framework of the International Classification of Functioning, Disability and Health (ICF). **METHODS:** We carried out a prospective intervention study with consecutive patients referred to two bariatric surgical units in the Basque Country. We included generic (SF-36, EuroQuol 5D) and specific questionnaires (Moorehead-Ardelt, Obesity-related Problems scale). The SF-36 mental and physical dimensions and stigma theory, allowed us to apply an approach based on the ICF. We measured effect size (ES), standardized response mean (SRM) and ROC curves. **RESULTS:** Of 82 operated patients, 79 were tracked for 2 years. Average weight loss was 49 kg (28%) and BMI was reduced from 50.6 to 31.8. The initial problems and the final improvements were larger in the physical dimensions. The benefit of treatment was large for almost all HRQL domains as measured by EQ-5D, SF-36, OP and Moorehead-Ardelt. Only the improvements in some of the mental domains of the SF-36 were classified as small or moderate. ROC curves were not sensitive to change in BMI. **CONCLUSIONS:** We suggest that the negative impact of severe obesity on HRQL is mainly a cause of disability as described in the ICF. Two-year improvements in HRQL are related to recovery from disability after gastric bypass treatment. The primary focus on the physical dimension is not contradictory with evidence of the impact of weight-related stigmatization in obese individuals at the social level and its consequences in mental health. In the ICF framework,

Surgery – Research On Methods

PSU27

FRacture Related Treatments After Primary Surgical Interventions Of Hip Fracture Eight Years Follow Up

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OBJECTIVES: The aim of our retrospective study was to analyze the further fracture related treatment/complication after primary treatment of femur neck fracture according to most frequently used types of operation. **METHODS:** The data derive from the financial database of the Hungarian National Health Insurance Fund Administration, based on the 10th revision of the International Classification of Diseases (ICD) with ICD code S7200. The following patients were included into the study: having social insurance identification number, being discharged from hospitals in 2000 after primary treatment of femur neck fracture, over the age 60. The patients with polytrauma or high energy trauma patient were excluded from the study. During the 8 year follow up period the further fracture related treatment and complications were analyzed according to the most frequently used types of operation. **RESULTS:** Altogether 3783 patients were included into the study. The distribution of primary surgical intervention was: arthroplasty 12.5%, screw fixation 73.6%, dynamic hip screw (DHS) 5.1%, femoral neck nailing 5.0%, Ender nailing 1.8%, Gamma nailing 1%, others 1%. The fracture related treatment rate was 14.5%. The main types of further fracture related treatments are listed: 5.7% hip replacement, metalwork removal 3.6%, replacement of implants 2.48%, aseptic and septic look: 1.7%, 0.7% resection arthroplasties. The further fracture related treatment rate according to the most frequently used types of operation: arthroplasty 4.8 %, screw fixation: 16.1 %, DHS: 7.8%, femoral neck nailing: 21.5%, Ender nailing: 19.4 %, Gamma nailing: 2.4%. **CONCLUSIONS:** The methods, providing quickly full weight bearing (Gamma nailing, DHS, hip arthroplasty) had lower complication rate, while the methods (screw fixation, Ender nailing, femoral neck nailing) providing partial weight bearing had higher complication rate. The backgrounds of fracture related treatments should be investigated in the future.

PSU28

ECONOMIC IMPACT OF STEREOTACTIC RADIOSURGERY FOR MALIGNANT INTRACRANIAL BRAIN TUMORS

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OBJECTIVES: Brain metastases occur in a majority of patients with malignant disease and result in decreased quantity and quality of life. Treatment alternatives range from whole brain radiation therapy (WBRT), neurosurgery, and the newest modality, stereotactic radiosurgery (SRS). This article reviews economic evaluations of SRS in the metastatic setting and compares to other treatment options. **METHODS:** Studies were included if they were published in peer reviewed journals, primarily in patients with malignant brain metastasis, and at least included a cost analysis between interventions. **RESULTS:** Uncertainty surrounding the cost-effectiveness of SRS exists due to lack of efficacy information between treatment alternatives, methodological limitations, and design differences between the available studies. However, when cost-effectiveness ratios are available, SRS appears to be a reasonable option in resource limited settings, with incremental cost-effectiveness ratios (ICERs) just below the \$50,000 range. **CONCLUSIONS:** Better designed economic analysis in the setting of randomized clinical trials or observational studies need to be conducted to fully understand the economic value of SRS.

DISEASE-SPECIFIC STUDIES

Infection – Clinical Outcomes Studies

PIN1

PHARMACIST PARTICIPATION IN ANTIRETROVIRAL DRUG MONITORING FOR THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV AT WARINCHUMRAB HOSPITAL, UBONRATCHATHANI, THAILAND

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OBJECTIVES: Thailand has been one of the leading developing countries to implement a national program to prevent mother-to-child transmission (PMTCT) of HIV. The objective of this study was to determine the impact of pharmacist intervention to monitor HIV-infected pregnant women. Pharmacist provided medication and guideline information including pharmacotherapeutic suggestion. **METHODS:** In this research, retrospective study was employed with descriptive statistics using average percentage frequency, making use of out-patients records of treatments in HIV-infected pregnant women who informed about the benefits of taking antiretroviral (ARV) drugs for PMTCT, side effects of ARV drugs, importance of adherence to drugs and the fact that HIV transmission to their infants can possibly occur despite ARV use by pharmacist. **RESULTS:** The HIV-infected pregnant women group of 24 cases, 4 were withdrawn due to unable to follow up, 20 cases have been followed-up and shown the effectiveness of medicine. There were 8 new patients (33.33%) firstly received ARV. The mean CD4 cell counts at baseline of all patients were 227 + -69.28 cells/mm³. Most regimens for treatment was highly active antiretroviral therapy containing zidovudine (AZT)+lamivudine (3TC)+lopinavir/ritonavir (LPV/r) 41.67% where treated with AZT+3TC+nevirapine were secondly used (33.33%). It was found that 34.4% of patients had adverse drug reactions. The ADR incidence of ARV was 4.0 patients and 6.2 events per 1000 person-day. Gastrointestinal system such as nausea and vomiting were found at 12.50% and 8.33% were diarrhea were the most organ system affected. During the study period, 3 patients had to change ARV regimens because of ADRs. 16.67% were non-compliance but less than 7 days at early period. The rate of MTCT of HIV was 8.33% after monitoring for one year. **CONCLUSIONS:** The results indicated that a medication monitoring and evaluating process by pharmacist associated with improved rational use of drug in HIV-infected pregnant women. This project provides a foundation for future quality improvement.

PIN2

SAFETY AND EFFICACY OF TENOFOVIR AS COMPARED TO OTHER NUCLEOT(S)IDE ANALOGUES IN THE TREATMENT OF CHRONIC HEPATITIS B – A SYSTEMATIC REVIEW WITH MIXED TREATMENT COMPARISON

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OBJECTIVES: The aim of this study was to assess efficacy and safety of tenofovir (TDF) as compared to other nucleot(s)ide analogues (NAs), i.e. lamivudine (LAM), adefovir (ADV) and entecavir (ETV) in the treatment of chronic hepatitis B virus (HBV) infection. **METHODS:** Assessment was based on randomized controlled trials (RCTs) identified by means of systematic review, carried out according to the Cochrane Collaboration guidelines. Studies met the inclusion criteria if they directly compared at least two of following interventions: TDF, LAM, ADV, ETV or placebo. The electronic medical databases (EMBASE, MEDLINE, CENTRAL) were searched. Two reviewers independently selected trials, assessed their quality and extracted data. Mixed treatment comparison (MTC) was performed with WinBugs software. If feasible, subgroup analyses were performed according to hepatitis B antigen e (HBeAg) and or LAM resistance status. **RESULTS:** We identified 30 relevant studies (6674 patients) with 12-144 weeks of follow-up. MTC showed that TDF increased the chance of HBV DNA clearance at the end of treatment period as compared to ADV (OR = 13.16 [3.21; 54.20]), LAM (OR = 61.09 [11.10; 503.78]) and ETV (OR = 9.55 [1.53; 76.98]). Subgroup analysis in HBeAg-positive subjects revealed that TDF was more effective than ADV (OR = 21.60 [1.67; 285.40]) and LAM with respect to HBV DNA clearance but no difference were found between TDF and ETV (OR = 11.24 [0.53; 342.57]). TDF showed similar efficacy to other NAs with respect to normalization of alanine aminotransferase activity (ALT) and histological improvement. TDF did not increase the risk of any and serious adverse events either in comparison with PLC or with other NAs. The rates of ALT flares were similar in all groups. **CONCLUSIONS:** TDF demonstrated the highest efficacy with respect to reduction of viral load in patients with chronic HBV and maintained a very good safety profile.

PIN3

COMPARING THE EFFICACY AND TOLERABILITY OF ANTI-RETROVIRAL THERAPY IN TREATMENT-NAÏVE HIV-1 INFECTED ADULTS: A SYSTEMATIC REVIEW OF RANDOMIZED CLINICAL TRIALS AND BAYESIAN MIXED TREATMENT COMPARISONS INCLUDING ATAANAVIR/R, DARUNAVIR/R, LOPINAVIR/R, AND EFAVIRENZ

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OBJECTIVES: A framework for comparative research is useful for health technology assessment (HTA) and clinical decision making. The objective was to systematically assess efficacy and tolerability of 3rd agents, atazanavir/r (ATV/r) compared to darunavir/r (DRV/r), lopinavir/r (LPV/r) and efavirenz (EFV), in treatment-naïve HIV-1 infected adults. **METHODS:** A systematic literature search was conducted to identify published randomized clinical trials (1-1-2000 to present), in which the four anti-retroviral (ARV) treatments were used for these patients. Pooled esti-