indications.

METHODS: This was a retrospective study of newly diagnosed cases of diabetes mellitus (DM) in people with no prior diagnosis of diabetes. The study was conducted in the setting of a general practice in a community of the north of Italy. The study included 50 patients, and the following data were collected: age, sex, presence of complications, and treatment. The primary outcome was the presence of complications.

RESULTS: The mean age of patients was 64.7 years, and 56% were women. The prevalence of complications was 40%, and the most frequent were retinopathy (38%) and nephropathy (32%). The treatment of DM was mainly based on oral antidiabetic drugs (88%). The overall complication rate was 40%, and the prevalence of complications was 38% for retinopathy, 32% for nephropathy, and 28% for neuropathy. The treatment of complications was mainly based on medical management.

CONCLUSIONS: The prevalence of complications in DM patients was high, and the treatment was mainly based on oral antidiabetic drugs. Further studies are needed to evaluate the effectiveness of different treatments.

REFERENCE:

patients (15.2%) of 2984 treated, and third line 529 patients (33%) of 1603 treated. We found similar results using the IMPACT database: 2.5% (7.8%) CRC patients had a test result of 0.005. The test result was included in our study. Since coronary angiography(AG) was not performed in all patients, the comparison of test accuracy was calculated by correcting referral bias to CAG depending on non-invasive test results based on the Bayes Theorem, and by reflecting referral bias in the 1-year follow-up results.

**PMD6**

THE CLINICAL USEFULNESS OF CT CORONARY ANGIOGRAPHY FOR THE DIAGNOSIS OF ICHMIC HEART DISEASE IN PATIENTS WITH CHEST PAIN

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**OBJECTIVES:** The aim of this study is to evaluate the accuracy of non-invasive diagnostic methods for ischemic heart disease in patients with chest pain.

**METHODS:** A retrospective cohort study was performed on new patients who have not received any diagnosis of ischemic heart disease or treatment before among those over 30 years of age who visited the cardiologist outpatient clinic at the Busan High School of Medicine in 2006 to 2008 in a single medical institution. Among non-invasive diagnostic methods, stress ECG(sECG), myocardial SPECT, and CT coronary angiography(CTCA) were included in our study. Since coronary angiography(AG) was not performed in all patients, the comparison of test accuracy was calculated by correcting referral bias to CAG depending on non-invasive test results based on the Bayes Theorem, and by reflecting the 1-year follow-up results.

**RESULTS:** Among 4743 patients selected, 2485 patients received more than one of the following non-invasive tests: sECG, AG, and CTCA for differential diagnosis. AG was performed in 853 patients (34.3%), SPECT in 997 patients (40.1%), and CTCA in 635 patients (25.6%). A total of 592 patients (23.8%) received CAG among the 2485 patients. Test indices adjusted to CAG were calculated by correcting referral bias to CAG.

**CONCLUSIONS:** The accuracy of diagnosing ischemic heart disease was the highest in CTCA, followed by myocardial SPECT and sECG by correcting referral bias to CAG.

**PMD7**

LONG-TERM CLINICAL OUTCOMES AFTER CORONARY BARE-METAL AND DRUG-ELUTING STENTING

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**OBJECTIVES:** To evaluate long-term clinical outcomes of elderly Medicare beneficiaries who underwent non-emergent coronary stenting.

**METHODS:** This population-based prospective study analyzed patients in a large nationally representative administrative claims database. The sample consisted of Medicare patients aged 65+ who underwent a non-emergent coronary stent between 2006 and 2010. Patients were identified by existence of a hospital claim for a bare metal stent (ICD-9-CM procedure code 36.06) or drug-eluting stent (ICD-9-CM procedure code 36.07).

**RESULTS:** Among 26,023 patients who underwent a coronary bare-metal stent (female = 40.15%, age = 75.38 ± 6.66, history of MI = 7.97%, history of CABG = 1.01%) and 74,448 patients who underwent a coronary drug-eluting stent (female = 40.17%, age = 73.78 ± 6.19, history of MI = 7.39%, history of CABG = 1.27%). Patients with drug-eluting stents had a lower risk of revascularization (29.7% vs. 31.65%, p < 0.001), CABG (1.40% vs. 2.57%, p < 0.001), and mortality (4.96% vs. 9.25%, p < 0.001) when compared to each other.

**CONCLUSIONS:** The use of drug-eluting stents was significantly correlated with a decline in revascularization, CABG, and death in comparison to bare-metal stents.

**PMD8**

EFFICACY OF SYSTEMIC HYPERBARIC OXYGEN THERAPY FOR NON-HEALING DERMATITIS ULCERS OF THE LOWER LIMB: SYSTEMATIC REVIEW AND META-ANALYSIS

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**OBJECTIVES:** About 10-15% of individuals with diabetes mellitus develop foot ulcers which precede 85% of amputations. Increased oxygen exposure, through the use of hyperbaric oxygen therapy (HBOT), has been suggested to encourage ulcer healing thus reducing the risk of amputation. The objective of this systematic review is to evaluate the efficacy of systemic HBOT for non-healing ulcers of the lower limb in diabetes patients.

**METHODS:** A systematic review of the published literature was conducted using controlled and keyword terms focusing on “HBOT” and “lower limb diabetic ulcers.” Databases searched included Medline, EMBASE, CINAHL, PubMed, Wiley’s Cochrane Library, and BIOSIS. Randomized controlled trials (RCTs) and observational studies were included and no year or language limits were employed. Two reviewers screened the articles. Pooled estimates of outcomes were calculated using Review Manager when appropriate. **RESULTS:** Of the 543 citations identified, 152 articles underwent full-text review. Data was abstracted from 27 publications (7 RCTs, 9 comparative observational, and 11 non-comparative observational studies). Primary outcomes of rates of amputation (major or minor) and wound healing were identified. Relative risk (RR) estimates from RCTs in the pooled analysis reflect a significant reduction in major amputation (RR = 0.32, 95% CI 0.11 to 0.93) with HBOT. For the proportion of unhealed wounds, HBOT is also favoured (RR = 0.45, 95% CI 0.32 to 0.64). **CONCLUSIONS:** The limited RCT evidence surrounding the efficacy of HBOT favours the use of HBOT for non-healing wounds of the lower limb for diabetes patients. Rigorous clinical trials with larger sample sizes, however, need to be conducted to more conclusively establish the benefits and harms of treating diabetic lower limb ulcers with HBOT.

**PMD9**

AN INNOVATIVE DISCUSSION ON PET-SCAN: IS IT THE POSITRON EMISSION TOMOGRAPHY A COST EFFECTIVE ALTERNATIVE IN THE PRE-TREATMENT EVALUATION OF CERVICAL CANCER COMPARED TO FIGO STAGING?

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**OBJECTIVES:** The increasing use of PET scan and surgical lymph node evaluation in the cervical cancer (CC) treatment has led to a clinical debate. The objective of this study is to provide a comparative analysis of final PET imaging in the work-up of CC. **METHODS:** A decision-tree model was designed to perform a cost-effectiveness evaluation including PET-scan versus FIGO staging. Primary outcome was cost primary treatment (CPT) due to the use of PET or FIGO. Cost-effectiveness ratios were calculated and results were expressed in terms of incremental cost effectiveness. **RESULTS:** The model is built from the 2011 database, number of CPT, incidence, and stage distribution of CC. Medicare reimbursement rates were used for costs. Lymph node metastasis rates for each stage, and performance characteristics of PET were abstracted from published data. Cited values were used and varied over for sensitivity analysis. **RESULTS:** The addition of PET-scan to FIGO staging for IA1 CC resulted in 60.5% more CPTs than FIGO staging at baseline. Stage IA2, 75.6% more CPT were performed and 187.14% in stage IB1, and an additional 322.24% in IB2. In stage IIA, PET-scan resulted in an additional 50(3%) CPT (ICER=$75.57), compared to 234.12% (CPT ICER=$61.59) in stage IIB, and the addition of additional CPT in stage IIIA, (ICER=$48.293). In stage IIIB, the addition of PET resulted in 240(19)% more CPT, and 41(8) additional CPT in stage IVA (ICER=$52.791 vs.$71.810). Outcomes were sensitive to changes in prevalence and PET performance in the sensitivity analysis. **CONCLUSIONS:** Routine pre-treatment PET-scan may be cost effective for stage IA2-IB2 CC. The inclusion of PET-scan in the pre-treatment evaluation of stage I CC increased the number of CPT with an elevated ICER. The findings of this model need to be validated in the clinical-setting to generate knowledge on best resources’ allocation.

**PMD10**

THE ROLE OF BIOMARKERS IN LUNG CANCER SCREENING: A SYSTEMATIC REVIEW AND META-ANALYSIS

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**OBJECTIVES:** Low dose computed tomography (CT) is the current recommended lung cancer screening modality for selected high risk population. The role of biomarkers in lung cancer screening deserves further studies. **METHODS:** A systematic review is performed by reviewing primary studies focusing on biomarkers for lung cancer screening using the following keywords (lung cancer) AND (screen?) OR (diagnosis) OR (diagnostic) OR (prediagnostic) OR (detection) OR (predict) OR (development) AND ([biomarker] OR [blood] OR [serum] OR [sera] OR [plasma] OR [antibodies] OR [urin] OR [sputum] OR [exhale]) OR (volatil) OR [epithelium] OR [epithelial] OR [bronchial] OR (airway)) in the title/abstract in Pubmed® on December 31, 2011. We further limited our search to clinical trials, meta-analysis, or randomized controlled trials published for the past 5 years in English. Two independent reviewers identified studies that met the selection criteria and data extraction after consensus was reached. **RESULTS:** The role of biomarkers in lung cancer screening is far based on very limited data as found in this systematic review. The role of biomarkers in lung cancer screening deserves further studies.

**MEDICAL DEVICE/DIAGNOSTICS – Cost Studies**

**PMD11**

BUDGET IMPACT OF CONVERTING STANDARD TREATMENT OF MENORRHAGIA FROM ROLLERBALL TO THERMAL BALLOON ABLATION IN CANADIAN HOSPITALS

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