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Validity of Self-Reported Hypertensive Status in the Multiethnic Cohort

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undergoing evaluation for PE was enrolled at two academic EDs between April 2005 and April 2006. Patients were enrolled and a serum sample was obtained prior to the results of diagnostic testing or therapy. Patients were followed for 90 days for the outcome of venous thromboembolism (VTE, either PE or deep venous thrombosis), which required the consensus of two of three blinded physician reviewers. A DD was measured in all patients and considered + if ≥ 500 ng/mL and MPO was measured on patients with +DD.

Results: We enrolled 305 patients, 21 with VTE (7%, 95% CI: 4-10%) within the follow-up period. One hundred sixty-six (55%) had a -DD, none with VTE (sensitivity 100%, 84-100%). Among the 139 patients with +DD, 39 (28%, 21-36% of +DD patients and 13%, 9-17% of total) had a MPO <22 ng/mL, none had VTE (sensitivity 100%, 91-100%). Thus, tandem measurement of DD and MPO would have decreased unnecessary subsequent pulmonary vascular imaging from 45% to 32% (95% CI for difference of 13% = 5-30%).

Conclusion: The tandem measurement of DD and MPO would have significantly decreased unnecessary pulmonary vascular imaging compared with DD alone. This finding should be validated prospectively.

3 Agreement of Medical and Undergraduate School Counselors about the Ways an Average Student Can Improve His Application to Medical School

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Background: This year more than 39,000 students applied to medical school. For the average applicant, advice on strengthening one's application to medical school is quite varied. There is little data that compares how a Medical School Admissions Office (MSAO) judges an applicant's activities compared with what pre-medical counselors (PMC) advise their undergraduate students to do.

Objective: To determine whether or not a disparity exists between the advice PMC offer undergraduate students and what the MSAO believes would improve an average student's application to medical school.

Methods: A survey was sent out to 100 undergraduate PMC and 123 MSAOs. The survey asked participants to rate 10 different activities on a scale of 1 to 10 that might increase an average student's chance of admittance to medical school. We stated that the hypothetical average student achieved a 30 MCAT score and an undergraduate GPA of 3.7 from a midlevel university. The list of activities was presented in a varied fashion to ensure no bias in the order of the survey. It was completed by 56 undergraduate schools and 72 medical schools. Those schools that did not respond to the first survey were queried a second time.

Results: Overall there was good agreement between the two groups with regard to the value of community service, volunteering in any medical setting, and obtaining a MPH or other graduate degree. PMCs tended to overvalue the importance of work in research, both clinical (7.34 vs. 6.14, $p < 0.002$) and laboratory (6.6 vs. 5.3, $p < 0.003$) compared to MSAOs. PMCs also undervalued retaking the MCAT and joining a service organization such as the Peace Corps.

Conclusion: There is general consistency given student applicants for medical school. Both PMCs and MSAOs agreed that volunteering in a medical/clinical setting is a highly valued activity. Participants similarly agreed that the least important activity was working in a non-medically related job to gain "real world" experience.

4 Validity of Self-Reported Hypertensive Status in the Multiethnic Cohort

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Background: In large cohort studies, data is most practically collected from self-reported surveys. However, the validity of the self-reported data is brought into question when it is verified with medical records.

Objective: To determine the accuracy of self-reported hypertensive status by comparing it with the diagnosis of hypertension (HTN) by a physician in a multiethnic population.

Methods: Study subjects were chosen from among the African American and Latino participants of the Multiethnic Cohort Study (MEC), a cohort of 215,251 individuals from the five main ethnic groups in California and Hawaii. MEC participants received a comprehensive 26-page questionnaire upon enrollment in which subjects reported their hypertensive status and indicated if they were taking anti-HTN medication. Three years later a second questionnaire was sent and subjects again reported their hypertensive status. We then contacted the subjects' health care providers to ascertain the subjects' hypertensive status, medication history, as well as representative blood pressures from the past four years.

Results: Of the 32 subjects self-reported as non-HTN, the PMD confirmed HTN in 50%. Of the 21 subjects self-reported as having HTN and taking anti-HTN meds, 85.7% were indeed hypertensive according to their physicians. Among non-HTN subjects (physician confirmed), the average systolic blood pressure (SBP) was 127 and among the self-reported HTN subjects (non-HTN per their physicians), the average SBP was 118. In self-reported non-hypertensive subjects who were diagnosed hypertensive by their physician, the average SBP was 137. Within hypertensive subjects (physician confirmed), the average SBP was 141.

Conclusion: The self-reported data for the absence of chronic

disease such as HTN is not accurate, suggesting the need for validation (either through medical record review or direct measurement) to ensure accuracy.

5 Low-dose Ketamine for Analgesia in the Emergency Department: A Retrospective Review

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Background: Pain is a common complaint and is often poorly treated in the emergency department (ED). Low-dose ketamine is a known analgesic, but no reports of its use in the ED are present in the literature.

Objectives: To determine the safety and efficacy of low-dose ketamine for analgesia in the ED.

Methods: A retrospective chart review was performed to identify all adult patients receiving low-dose ketamine for analgesia in our ED. Cases were identified by pharmacy record of ketamine administration, and cases of low-dose ketamine administration were identified by review of the medical record. Low-dose ketamine was defined as the administration of approximately 0.1 to 0.6 mg/kg of ketamine for pain control.

Results: Thirty-five cases were identified in which patients received low-dose ketamine in the ED over a two-year period. Doses ranged from 5 mg to 35 mg. Administration was intravenous in 30/35 (86%) and intramuscular in 5/35 (14%) of cases. Opioids were administered, prior to a co-administered low-dose ketamine, in 32/35 (91%) of the cases. Improvement in pain was observed in 19/35 (54%) cases who received low-dose ketamine. Pain scores were not observed to improve in 8/35 (23%) cases. Insufficient data were available to determine effect for an additional 8/35 (23%). Of these latter cases, five (14% of total) had likely benefit and three (9% of total) had no benefit based on disposition. No significant adverse events were identified in any of the 35 cases.

Conclusions: The administration of low-dose ketamine in the ED appears to be safe. Our retrospective case series shows that low-dose ketamine for pain control may be efficacious in some patients in the ED. However, prospective, randomized, controlled trials are needed to determine the efficacy of low-dose ketamine for analgesia in the ED.

6 Incidence of Ovarian Tumor on 1st-Trimester Pelvic Ultrasounds in the ED

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Objectives: Focused emergency department (ED) 1st-trimester pelvic ultrasound (FTPU) examination for symptomatic pregnant patients has evolved to become standard of care at major EDs. Concerns about the risks of overlooking clinically significant incidental findings on organ-specific scans – risks of omission - continue to be used by radiologists to justify the ordering of “formal” ultrasound imaging - complete regional scan performed by ultrasound technicians and interpreted by radiologist ultrasonologists. Using ovarian tumor as an index for this risk of omission, we analyzed the findings on formal pelvic ultrasounds over a five-year period for incidence of ovarian tumor and compared it with that of about 0.1% reported in OB literature.

Methods: 1,520 consecutive formal FTPUs that were performed as part of the ED evaluation of 1st-trimester pregnant patients from May 2001 to May 2006 were reviewed. Patients were included if they had vaginal bleed and/or pelvic pain and < 14 wks pregnant. Pelvic masses seen on ultrasound were recorded and followed for diagnosis of ovarian tumor. In addition, clinically important incidental findings, defined as requiring emergent interventions or definitive follow-up, were also recorded. The hospital is a Level I trauma with an EM residency and an annual census of 43,000 visits/year.

Results: A total of two for an incidence of 0.14% of ovarian tumors was found in this case series. In addition, seven (0.53%) abnormalities were clinically significant: 1 (0.07%) ovarian torsion, 1 (0.07%) kidney stone, 1 (0.07%) angiomyolipoma, 1 (0.07%) gallstones, 3 (0.20%) endometrial/cervical lesion. Sixty-nine (4.54%) abnormalities were considered minor for findings such as subchorionic hematoma or leiomyomata.

Conclusions: The incidence of ovarian tumors seen in formal FTPU ordered from the ED is rare and similar to that in the normal OB population. It is unlikely that emergency medicine physicians performing focused FTPU scans will encounter increased clinically significant incidental pathology.

7 A Sexual Assault Response Team: the South Bronx Experience

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Background: Lincoln Medical Center is the only city hospital serving the South Bronx, the poorest congressional district in the nation. In April 2004, the Bronx Sexual Assault Response Team (SART) was launched to provide specialized care to survivors of sexual assault in this community via a standardized protocol outlined in our paper.

Method: We compared the care received by survivors before and after the inception of SART.

Results: Of the 173 SART patients, 100% were triaged