

and all protocol/indication liver biopsies were reviewed and graded for steatosis (0–3), inflammatory (NASH) activity (0–3), and fibrosis (0–4) by a single pathologist blinded to clinical data. **Results:** *Clinical Data:* LT for CC was performed for 90 of 832 (11%) adult LT pts, mean age 53 ± 12 yrs (range 21–69 yrs), 54% men, and follow-up of 81 ± 62 mo (range 0–170 mo). At LT, the prevalence of hepatoma was 4% and mean calculated MELD score was 16.4 ± 6.2 (range 6–33). *Survival:* One and five-yr pt survival were 88% and 85% respectively. Repeat LT was required for 4 of 90 (4%). Cardiovascular disease (CVD) deaths occurred in 11 of 27 (41%) pts, 5 (55%) of which were within one yr of LT. *Metabolic Parameters:* IR was noted in 52% of pts pre-LT. During follow-up, no change was noted in weight, BMI, or glycemic control when compared to pre-LT values ($p = ns$). During the follow-up period, triglycerides, total and LDL cholesterol increased ($p < 0.01$) and HDL cholesterol declined ($p < 0.01$). *Histology:* At LT, grade 1 and 2 steatosis were noted in 39% and 6% respectively. At 1, 3, and 5 yrs post-LT, steatosis grade ≥ 1 was noted in 39%, 76%, and 89%; steatosis \geq grade 2 was noted in 11%, 69% and 71% of pts respectively. Mean steatosis grade was 0.91 ± 0.9 , 0.96 ± 0.87 , and 1.46 ± 0.96 ($p < 0.01$). Mild NASH was observed in 1/3 of pts and did not increase over time. Comparable NASH grade was 1.06 ± 0.59 , 0.68 ± 0.71 , and 0.66 ± 0.89 ($p < 0.05$), and fibrosis from 1.09 ± 1.15 , 1.0 ± 0.97 , and 1.5 ± 1.3 ($p < ns$). One pt developed cirrhosis by 5 yr post-LT. **Conclusions:** NAFLD is a common sequela for pts undergoing LT for CC. Progression to advanced fibrosis was uncommon in this cohort and survival is excellent. IR is present in a majority of patients with CC with CVD is the leading cause of mortality post LT. Hyperlipidemia primarily correlates with recurrent NAFLD post-LT.

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ASSOCIATION OF CD4 COUNTS WITH TETANUS ANTIBODY TITERS AMONG HIV-INFECTED PATIENTS. K. Alagappan, B. Donohue, C. Hoey, S. Geboff, M.H. Kaplan, J. Cervia, R. Silverman, Long Island Jewish Medical Center, North Shore-LIJ Health System, New Hyde Park, NY.

Background: Approximately 90% of the US population has protective levels of anti-tetanus antibody (ATA). Elderly individuals demonstrate lower protective levels of ATA compared with the general population; decreased immune system function has been postulated. It is unknown if human immunodeficiency virus (HIV) infection is also associated with non-protective ATA. **Objective:** Determine if there is an association between CD4 counts and ATA in HIV-infected patients. **Methods:** A convenience sample of outpatients from 2 HIV specialty clinics was recruited from May 2000 until July 2004. ATA was measured by ELISA, and a level greater than 0.15 IU is considered protective. CD4 counts were measured by flow cytometry within 60 days of ATA testing. The lowest CD4 count documented in the clinic record was also documented (nadir CD4). For analysis, a CD4 count of < 100 cells/ μ L was considered severe illness. Data were analyzed with standard parametric and non-parametric testing. Logistic regression models were developed to test association with tetanus protection. **Results:** 262 subjects were included with a mean age of 43 years (range 20 to 67 years). A total of 227/262 (87%) had protective ATA. The CD4 count for patients with protective ATA was 459 cells/ μ L compared to 353 cells/ μ L for nonprotective ATA ($p = 0.055$). When the nadir CD4 count was analyzed, patients with protective ATA had 208 cells/ μ L and nonprotective had 128 cells/ μ L ($p = 0.006$). Those with nadir CD4 counts < 100 cells/ μ L were less likely to have protective ATA (86/106, 81%) than those with nadir counts ≥ 100 cells/ μ L (141/156, 90%, $p = 0.03$). After adjusting for factors that may influence ATA, including country of birth, logistic regression models found an association between lower CD4 and less tetanus protection trending toward significance for contemporaneous CD4 counts ($p = 0.06$). The adjusted association between ATA and CD4 was significant when nadir CD4 counts were analyzed ($p = 0.01$). **Discussion:** HIV-infected individuals have generally similar protection to tetanus as the general US population. However, among HIV patients, a history of lower CD4 counts is more often associated with non-protective tetanus titers. This suggests that in some patients the memory for this antigen is lost, particularly when CD4 counts drop below 100 cells/ μ L. **Conclusion:** Clinicians must be aware that HIV-infected patients with low CD4 counts may be at greater risk for non-protective ATA. Support received from North Shore-LIJ Research Institute, GCRC, Grant # M01 RR018535.

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NONSURGICAL TREATMENT OF DUPUYTREN'S DISEASE. M.A. Badalamente, L.C. Hurst, Department of Orthopaedics, State University of NY at Stony Brook, NY. Dupuytren's disease is a fixed flexion contracture deformity of the hand currently treated by surgical fasciectomy of the collagenous cords responsible for the finger joint contractures. Our prior Phase 2 controlled, clinical trials have clearly indicated safety and efficacy of collagenase injection therapy as an alternative to surgery. The purpose of this Phase 3 study was to further test collagenase injection as a nonsurgical treatment for Dupuytren's disease. **Methods:** 35 patients were enrolled in the random, placebo, double-blind control protocol allowing for an assignment to 0.58 mg collagenase or saline placebo, maximum three injections. At this time, the control treatment code may not be unmasked. However, patients had the option to enroll in an additional protocol either for treatment failure or because they had additional contracted joints of the same or opposite hand. The second protocol allowed for a maximum five open label, 0.58 mg, collagenase injections, given at one month intervals. Seventeen patients were treated in the open label protocol, 12 male and 5 female, mean age 62 years, 12 metacarpophalangeal (MP) joints and 16 proximal interphalangeal (PIP) joints. The initial mean MP and PIP joint contractures were 45° and 43°, respectively. Collagenase injections, 0.58 mg, were to the collagenous cords, using an insulin syringe, 0.25 mL for MP joints and 0.20 mL for PIP joints. Patients were seen in serial follow up at 1, 7, 14 and 30 days, 2, 3, 6, 9 and 12 months. **Results:** 92% of the MP joints and 75% of the PIP joints treated achieved full, normal finger extension (0°), most within one week of one collagenase injection. Results were sustained in the longer term, mean follow-up, 125 days for MP joints and 107 days for PIP joints. There was no loss of normal finger flexion, or normal grip strength. Adverse events included pain associated with "cord rupture," hand edema and palmar ecchymosis. These resolved without problems in 7–14 days. **Conclusions:** Collagenase injection therapy for Dupuytren's disease continues to show clear merit in Phase 3 clinical trials as a safe and effective alternative to surgical fasciectomy. National, multicenter, Phase 3 study of this promising method will begin in the next several months. This study was supported by the FDA (Grant 001437), the NIH (GCRC-M01RR10710) and the Biospecifics Technologies Corp.

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MEDICATION USE AND CLINICAL OUTCOMES FROM PREADMISSION TREATMENT THROUGH ONE-YEAR FOLLOW-UP FOR CHILD PSYCHIATRIC INPATIENTS. J.C.

Blader, Stony Brook State University of New York, School of Medicine, NY. **Background:** Recent clinical research has established an evidentiary basis for the pharmacotherapy of several psychiatric disorders of childhood. However, children hospitalized for psychiatric disorders seldom experience robust response to monotherapy with the agents studied, and consequently receive polytherapy involving medication combinations that lack data to support their efficacy. Longitudinal, observational data on medication use and outcomes for this patient group may furnish information useful to the development of controlled research on the potential effects of medication combinations. **Objectives:** 1) To assess the utilization of specific pharmacotherapy strategies for child psychiatric inpatients from pre-admission care through 12 months after discharge. 2) To examine associations between these strategies and postdischarge outcomes. **Method:** Prospective follow-up of 83 5–13 year-old children admitted to acute inpatient care for aggressive behavior in the context of a disruptive behavior disorder. Treatment and symptom severity data were obtained via standardized rating scales at admission, discharge, and 3, 6 and 12 months after discharge. **Results:** *Utilization:* Number of concurrent medications increased over assessment times. Changes in children's pharmacotherapy occurred most frequently during hospitalization and 3 months after discharge, but even between postdischarge assessments over half experienced treatment changes, most often initiation of new agents. Treatment with antipsychotics and mood stabilizers increased over assessment times while SSRI treatment decreased. *Outcomes:* Children treated with stimulants and risperidone 3 months after discharge had significantly improved ratings, adjusted for admission scores and concurrent medications; improvements were not apparent at 6- and 12-month follow-ups. Children treated with SSRIs at 6 months postdischarge had higher problem severity ratings. Those who maintained lithium and SSRI treatment between 6 and 12 months displayed improvements. Medication interactions suggested better outcomes with combined risperidone and lithium at 12 months and less advantageous outcomes for children treated with alpha-agonists unaccompanied by stimulants. **Conclusions:** Complexity of pharmacotherapy for child inpatients ratchets upwards from admission through one year after discharge. Hospital-initiated treatment is commonly altered soon after discharge and throughout follow-up. Within the limitations of observational methodology, postdischarge outcomes seem related to specific pharmacotherapy regimens, some of which may improve children's functioning while others may worsen it.

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UNIVERSITY OF FLORIDA GENERAL CLINICAL RESEARCH CENTER DNA BANK. M. Brantly, T. Mathews, W. Hyde, D.W. Theriaque, C. Wang, University of Florida, Gainesville, FL.

Introduction: Genetic studies depend on well-characterized phenotypes to establish relationships between disease and genetic mutations. Researchers typically study and collect DNA from a single group of subjects and may not have ready access to other study populations that may be excellent controls for their study population. The University of Florida General Clinical Research Center (UFGCRC) evaluated approximately 1000 new study subjects in 2003–2004. To allow GCRC researchers to expand their gene-based studies beyond their own study groups the GCRC established a DNA bank that enrolled subjects admitted to the GCRC inpatient and outpatient facilities. **Methods:** Following consent, up to 20 mL of whole blood was obtained and the attending physician designated up to 10 ICD-9 codes that best characterized the study subject. A secure database, reporting and tracking system was developed using MySQL/PHP and Freezerworks 1.0.4 (DataWorks Development, Mountlake Terrace, WA). Demographic information was collected from all study subjects. DNA was extracted from whole blood using a Gentra Puregene DNA extraction kit (Minneapolis, MN). DNA concentration and purity were established by spectrometry at UV wavelengths of 260 and 280 nm. The quality of extracted DNA was further determined by demonstrating that the alpha-1-antitrypsin gene could be amplified using Taq polymerase (Promega, Madison, WI). **Results:** To date 324 subjects have consented to participate in the GCRC DNA bank. Twenty-two percent of the subjects are male. Ethnicity-race percentages are 71.3% Caucasian, 21% African-American, 6.5% Hispanic and 1.6% are Asian. Age distribution is 22.8% are > 50 years old, 23.5% age 36–50 years, 45.7% age 20–35 years and 8% are less than 20 years old. Disease categories included 36% normal, 18.2% endocrine, 13.3% cardiovascular, 10.5% gastrointestinal, 9.3% genital-urinary, 4.9% respiratory, 7.7% infectious disease, 33.3% rheumatology and 14.2% other diseases. The mean DNA concentration is 306 ± 208 μ g/mL ($n = 212$), DNA purity 1.98 ± 0.07 (A260/A280), mean amount of DNA/subject, 839 μ g. The alpha-1-antitrypsin gene was successfully amplified in 99% to the subjects evaluated to date. **Conclusion:** The GCRC has established a new resource for GCRC investigators to utilize for the purpose extending their gene-based research. Access to the sample collection is through a GCRC Advisory subgroup panel, which upon approval of a brief application provides the investigator with normal and disease specific DNA samples.

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ASSOCIATION IN BREAST AND COLON CANCER SCREENING BEHAVIOR IN WOMEN. R. Carlos, Department of Radiology, University of Michigan Medical Center, Ann Arbor, MI.

Purpose: Gender-based psychosocial factors appear to influence colorectal cancer (CRC) screening adherence. Given its near universal acceptance by the public, screening mammography represents a potential "teachable moment" for educating patients about the risk of CRC. Accordingly, to better understand screening behaviors among women, data from the Behavioral Risk Factors Surveillance Survey (BRFSS) were analyzed to identify potential relationships that would allow interventions to enhance CRC screening. **Methods:** Women 50 years and older who participated in the BRFSS 2001 survey were included in the analysis. CRC, breast and cervical cancer screening adherence with American Cancer Society guidelines was determined. Breast and cervical cancer screening adherence and general health and demographic characteristics were used as predictors of CRC screening adherence. **Results:** After adjusting for sociodemographic factors in a multivariate analysis, women 60–69 years old (adjusted OR 1.50, $p < 0.01$) and 70–79 years old (adjusted OR 1.39, $p < 0.01$), having achieved at least some high school (adjusted OR 1.62, $p < 0.01$) or college (adjusted OR 2.11, $p < 0.01$) education, having health coverage (adjusted OR 1.67, $p < 0.01$) or a personal physician (adjusted OR 1.60, $p < 0.01$), and adherence to screening mammography (adjusted OR 2.42, $p < 0.01$) and Pap smear (adjusted OR 1.70, $p < 0.01$) independently increased the likelihood of CRC screening adherence. Women in self-reported good general health were less likely to adhere to CRC screening guidelines (adjusted OR