

Two predictive models were studied within the multiple logistic regression procedures. The fit of the models was tested using the classical chi square test. The goodness of the predictive models was also studied through the ROC curve and the AUC (Area Under Curve) index both in the training set and the validation set. These results were collected in two tables which display sensitivity, specificity and percentage of correct classification for 7 different cutoff points. The analysis was made with SAS Systems.

**Results:** With a cut off value of 0.5 the first model had in the training set sensitivity near 97% specificity near 97% and + predictive value and - predictive value of 93.9% and 94.4%; in the validation set the corresponding values were, with the same cut off, 85.7%, 93.5%, 93.3% and 88.2% respectively. The second model, with a cut off of 0.5 had in the training set sensitivity 90.9%, specificity 97.4%, + predictive value 96.2%, and - predictive value 93.7%; in the validation set the corresponding values were 97.7%, 87.5%, 93.3% and 88.2%.

**Conclusions:** Both models provide an accurate prediction of the presence or absence of SF from common laboratory data, thus allowing liver biopsy to be avoided in several instances

# *G. Metabolic liver diseases, immunology, ethanol 5. Ethanol*

#### P.90

##### PIROXICAM INDUCED CHOLESTATIC HEPATITIS AND DIFFUSE PULMONARY FIBROSIS: CASE REPORT AND REVIEW OF LITERATURE

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**Background and aim:** Antibiotics and NSAIDs are common causes of drug-induced liver injury (Hussaini2007). Most NSAIDs can cause hepatotoxicity (Hannequin1988) with no evidence to identify one molecule more toxic than others (Miwa1997). This rare but severe side-effect led to withdrawal of some NSAIDs from market (Tan2007). Piroxicam has been associated with idiosyncratic fatal liver necrosis (Paterson1992) (Planas1990).

**Material and methods:** We report a 78 y.o. Italian woman admitted for acute cholestatic hepatitis after prolonged piroxicam intake. Previous history of breast cancer (no radiation treatment). All markers for viral, metabolic, autoimmune hepatitis were negative. There was temporal relationship between piroxicam use and hepatitis onset. Bilirubin had a peak of 36 mg/dl, with transaminases up to 1500 U/l. Liver function remained stable with slow but complete remission after drug discontinuation. Respiratory distress complicated the F/U period (severe hypoxia).

**Results:** Interstitial lung disease (ILD) was found at Chest X-ray; high resolution CT Scan (HRCT) showed bilateral ground glass opacities compatible with diffuse pulmonary fibrosis. Chest X-Ray 6 months before admission was negative for ILD, thus pulmonary fibrosis is postulated to be caused by piroxicam. Fiberoptic bronchoscopy/BAL was not possible due to poor condition. Total parenteral nutrition was started. Unfortunately after an initial improvement, this lady developed a CVC-related MRSA infection and died after the onset of mitral valve endocarditis.

**Conclusions:** Lung involvement has been described during NSAIDs therapy (Kondo1999): piroxicam has been associated to eosinophilic pulmonary infiltrates (Pflitzenmeyer1994) and to diffuse pulmonary fibrosis (Harris1994). HRCT is the gold standard for diagnosis (Erasmus2002). This is to our knowledge the first report of combined liver-lung toxicity in a single patient. Misdiagnosis of associated pulmonary involvement may account for high risk of mortality in patients with drug induced liver disease.

# *G. Metabolic liver diseases, immunology, ethanol 6. Drugs toxicity*

#### P.91

##### USE AND SAFETY PERCEPTION OF HERBAL REMEDIES IN ITALIAN PATIENTS WITH LIVER/BILIARY TRACT DISORDERS

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**Background and aim:** Use of Herbal Remedies (HR) has increased in the general population, particularly among patients with various chronic diseases/conditions. Pharmacovigilance and regulations regarding HR are still incomplete, and HR-related adverse reactions are increasingly reported. Nevertheless, studies assessing prevalence of HR use among patients with liver/biliary tract disorders are limited and no data are available in Italy.

The aim of the study was to assess the prevalence of HR use in the population attending our outpatient liver/biliary tract disorders clinic, the main clinical and demographic characteristics, and the safety perception of these products.

**Material and methods:** From October 2007 to April 2008, 231 consecutive patients (119 M, 112 F) were interviewed, using an ad hoc developed questionnaire. Face to face questionnaire addressed the following: body mass index (BMI), presence of chronic conditions, use of conventional therapy, HR-use and perceptions regarding their safety. Data were expressed as mean ( $\pm$ SD) or number/total, and evaluated by student-t and fisher tests as appropriate. Multivariate logistic regression (MLR) was also performed.

**Results:** The prevalence of HR use was 35.5%. At MLR it was more common in women ( $p = 0.01$ ), and in patients with lower BMI ( $p = 0.03$ ). Users were more affected by chronic conditions than non users ( $p = 0.0002$ ). 67% of users used HR in addition to conventional therapy. 72% of patients had never considered possible, potentially harmful HR-drug interactions.

**Conclusions:** More than a third of patients attending liver/biliary disorders clinic uses HR. Misconceptions about the safety of HR is widespread among them. This issue should be specifically considered and addressed with patients and considered in their management.

# *G. Metabolic liver diseases, immunology, ethanol 6. Drugs toxicity*

#### P.92

##### THE NAFLD FIBROSIS SCORE, LIVER ENZYMES AND INSULIN RESISTANCE IN A GROUP OF OBESE AND SEVERELY OBESE PATIENTS

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**Background and aim:** In obesity, nonalcoholic fatty liver disease (NAFLD) is mostly associated with insulin resistance (IR). Even a slight increase of liver enzymes highlights the hepatic injury. IR also induces liver fibrosis leading progressively NAFLD to cirrhosis. Angulo et al. (2007) suggested a noninvasive simple scoring system that may predict the risk of fibrosis in NAFLD patients: the NAFLD fibrosis score. The aim was to investigate the values of IR by Homeostasis Model Assessment (HOMA-IR), aspartate transaminase (AST), alanine aminotransferase (ALT), gamma glutamyltranspeptidase (GGT), and the NAFLD Fibrosis Score (FS) in obese and severely obese patients.

**Material and methods:** From Jan. to Nov. 2008, 84 obese patients (age 18-68 y; F 60; BMI 31-54 kg/m<sup>2</sup>), were consecutively selected after admission to our Gastroenterology Unit for the bariatric therapy assessment. Clinical and laboratory data were collected. IR was calculated by the Homeostasis Model Assessment (HOMA-IR), as fasting