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Overcoming An Old Scurge With A New Face
(HIV/TB Co-infection)

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Asthma

DETERMINE OF EDUCATIONAL NEED FOR ASTHMATIC PATIENT IN IRAN-ZANDJAN, IN 1991 YEAR

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Background & Aim:

One of the causes that asthmatic patients (30%) is hospitalized for lack self care is in United States. Thus attention to quality of self care is the most important. Aims study was determine of educational needs: about knowledge of asthma, provoking factors, prophylaxis treatment, complications and self management.

Methods:

This research was descriptive study to determine educational need for asthmatic patient in Iran-zandjan seventy one of asthmatic patients randomly selected for study. These patient were interviewed by questionnaire and data was analyzed by chi2 test.

Result:

The finding of study show that 80.3% of patient about prophylaxis-treatment, 87.3% of patient about complication illness and 88.7% of patient about self-management, had need to education.

There was significant association between educational need and the number of attacks and also between the number of patient who referred to hospital and educational need.

Conclusion:

Prevention and treatment of asthmatic patient by educational nursing is one of the most important strategically intervention. and also the findings this of study show that asthmatic patient need to education through health care in Iran-sandman..

Keywords:

Asthmatic- educational need

Asthma

PEAK EXPIRATORY FLOW RATES OF HEALTHY SCHOOL GIRLS FROM COASTAL INDIA – PREDICTION EQUATIONS

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Peak expiratory flow rate (PEFR) is simple and reliable in monitoring patients with bronchial asthma and other obstructive airway diseases. Data are available for Caucasian children but a country as diverse as India needs to establish regional standards. Though not a substitute for spirometry, it correlates with forced expiratory volume in one second.

Objective:

To derive prediction equations for PEFR using anthropometrical indices.

Methods:

Cohort of 1937 healthy school girls between 6 and 13 years were recruited in coastal Mangalore, India. Children with acute respiratory infections and recurrent wheeze were excluded. Age and anthropometrical indices were recorded. Technique of PEFR using Wright's peak flow-meter was demonstrated. Best of three results performed by subjects was considered. Correlation coefficient of anthropometrical measurements with PEFR was estimated and was used to develop linear regression equations (LRE) and multiple regression equations (MRE) by statistical package SPSS (Version 15).

Results:

Age, weight and height showed good correlation with PEFR ($p < 0.01$). LRE derived for PEFR using these independent variables were $-364.807 + 4.625$ (Height-cm) with $R^2 = 0.937$ and standard error of estimate (SEE) 22.797; $-67.270 + 6.188$ (Weight-kg) with $R^2 = 0.847$ and SEE 37.722; $-4.990 + 26.352$ (age-years) with $R^2 = 0.845$ and SEE 34.943. MRE for PEFR were computed using 2 or 3 predictors ($p < 0.01$) namely height, age ($R = 0.938$); height, weight ($R = 0.937$); age, weight ($R = 0.891$) and height, weight, age ($R = 0.938$).

Conclusion:

Regression equations to predict the pulmonary function showed strong predictability for PEFR. These equations can be considered as referral standards for coastal Indian girls.

Asthma

INHALED STEROID THERAPY AND DURATION OF HOSPITAL STAY AMONG DIFFERENT ETHNIC ASTHMATIC PATIENTS IN A MALAYSIAN HOSPITAL

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Introduction:

Inhaled steroids remain the mainstay in asthma preventive therapy. However, steroid responsiveness among different Malaysian ethnic groups is not known.

Objectives:

To determine length of hospital stay among asthmatic patients on regular inhaled steroid therapy among different ethnic groups in an urban Malaysian hospital.

Method:

Adult inpatients records over a 12 month period with a diagnosis of asthma, the percentage of regular inhaled steroid therapy and duration of hospital stay among these patients was reviewed. Diagnosis of pneumonia, 20 pack year history of smoking or presentation to hospital for other medical illnesses was excluded.

Results:

99 patients were included. Only 48 (48.5%) were on steroid therapy. Table 1 shows mean length of hospital stay among different ethnic groups on prior steroid therapy.

Table 1.

	Malay (n=29)	Chinese (n=4)	Indian (n=14)	Other (n=1)	P value
Length of hospital stay (days)	5.2 ± 2.6	5.2 ± 0.5	6.4 ± 4.5	4.0	>0.05

± standard deviation

Conclusion:

There is no significant difference in duration of hospital admission among different ethnic groups on prior inhaled steroid therapy. This suggests no difference in inter-ethnic steroid responsiveness. Further study is required to determine whether there is any inter-ethnic difference in steroid responsiveness in a Malaysian population.



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Asthma

ASSOCIATION OF BETA2 ADRENOCEPTOR POLYMORPHISMS AND SEVERITY OF ASTHMA IN MALAYSIAN ASTHMATICS: A PILOT STUDY

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Objectives:

This study was designed to determine the allelic and genotype frequencies of the Arg16Gly and Gln27Glu polymorphisms of beta2 adrenoceptor gene in Malaysian asthmatics. This study also hopes to demonstrate the association between the Arg16Gly and Gln27Glu polymorphisms and the combination genotypes of the beta2 adrenoceptor gene with the severity of asthma.

Method:

Peripheral blood was taken from 154 asthmatic patients recruited from the Seremban Hospital and the buffy coat was separated for DNA extraction. The region of interest was amplified by PCR and sequenced for determination of allelic and genotype frequencies of the Arg16Gly and Gln27Glu polymorphisms. The severity of asthma was categorised according to GINA guidelines classification (2006). The statistical analysis was done with SPSS using Mann-Whitney and Kruskal-Wallis tests where appropriate.

Results:

The results of this study showed that the allelic frequencies of the Arg allele of position 16 and the Gln allele of position 27 of the beta2 adrenoceptor gene were 0.531 and 0.918 respectively in Malaysian asthmatics. There was no significant association between the Arg16Gly and Gln27Glu polymorphisms of the beta2 adrenoceptor gene and the severity of asthma. The combination genotype of Arg16Arg/Glu27Glu and Arg16Arg/Gln27Glu were not seen in the Malaysian asthmatics. The association analysis of the combination genotypes for position 16 and 27 polymorphisms of the beta2 adrenoceptor indicated that there was no significant relationship between the genotypes and severity of asthma.

Conclusions:

These preliminary findings indicate that there is no association between the Arg16Gly and Gln27Glu polymorphisms and genotypes with the severity of asthma in Malaysians.

Asthma

ASSESSING ASTHMA CONTROL IN PATIENTS ATTENDING A SPECIALIST CLINIC WITH THE ASTHMA CONTROL TEST

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Objective:

The Asthma Control Test (ACT) is a five-item self-administered questionnaire that has been validated for assessing asthma control with or without lung function testing. The aim of this study was to examine the utility of ACT in assessing asthma control in patients attending a specialist clinic.

Methods:

Patients aged 12 years or older with asthma and no other respiratory conditions completed the ACT questionnaire in English, Bahasa Malaysia or Mandarin during the routine, previously scheduled specialist asthma clinic visit. During the visit, PEFr and FEV1 were measured and the level

of asthma control for each subject was rated by the asthma specialist as "controlled", "partly controlled" or "not controlled" according to the 2006 GINA guidelines.

Results:

Eighty patients [mean age, 54.4 years (SD, 14.9) (range, 13 to 85 years)] completed the ACT questionnaire. Using lung function measured by % predicted PEFr, of 40 patients with specialist-rated uncontrolled asthma, 1 (2.5%) had a total ACT score of 25 (total control), 4 (10%) had a score of 20 to 24 (well controlled) and 35 (87.5%) had a score of 19 or less (not well controlled). Using lung function measured by % predicted FEV1, of 53 patients with specialist-rated uncontrolled asthma, 1 (1.9%) had a total ACT score of 25 (total control), 13 (24.5%) had a score of 20 to 24 (well controlled) and 39 (73.6%) had a score of 19 or less (not well controlled).

Conclusion:

The ACT was able to identify at least 70% of patients whose asthma was not controlled.

Asthma

PATIENTS' PERCEPTION OF ASTHMA CONTROL

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Objective:

The aim of this study was to determine the perception of patients with asthma on the control of their disease.

Methods:

During the routine, specialist asthma clinic visit, the level of asthma control for patients with asthma was rated by the specialist as "controlled", "partly controlled" or "not controlled" according to the 2006 GINA guidelines. The patients were also asked to rate the control of their asthma during the past 4 weeks.

Results:

Eighty patients [mean age, 54.4 years (SD, 14.9) (range, 13 to 85 years)] participated in this study. Based on the GINA guidelines and using lung function measured by % predicted PEFr, the specialist rated the asthma in 40 patients as uncontrolled, in 32 patients as partly controlled, and in 8 patients as controlled. Of the 40 patients rated by the specialist as having uncontrolled asthma, 5 (12.5%) and 2 (5%) patients, respectively, rated their asthma as well controlled and completely controlled. Of the 32 patients rated by the specialist as having partly controlled asthma, 17 (53.1%) and 5 (15.6%) respectively, rated their asthma as well controlled and completely controlled. Only 14 patients (35%) with specialist-rated uncontrolled asthma perceived their asthma as not controlled or poorly controlled.

Conclusion:

The level of asthma control perceived by the patient did not match their reported symptom severity and lung function. A large proportion of patients overestimated the level of control of their asthma.

Asthma

THE 3D (DRUG DUPLICATION DETECTOR) APPROACH AS A TOOL IN DETECTING THERAPEUTIC DUPLICATION IN THE MANAGEMENT OF BRONCHIAL ASTHMA WITH INHALERS

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Introduction :

Therapeutic Duplication is when two drugs from the same therapeutic category are used at the same time by the same person³.

Methods :

Details of drugs for bronchial asthma were adapted from, Ministry Of Health, Malaysia, Drug Formulary Book (4th Edition December 2004). Newer drugs in the market which are being used were also included.

Relevant information was extracted from various published studies.

Results :

The 3D (Drug Duplication Detector) Approach was designed in the form of a table to detect the therapeutic duplication with Inhalers.

Conclusion :

In relation to the management of Bronchial Asthma in Malaysia, we have numerous pharmaceutical companies which offer a variety of drugs for asthma management.

Inhalers are the commonest form of delivering medications both as controllers and relievers.

Studies show therapeutic duplication leads to potential complications.

The study end points included 10 clinical outcomes related to therapeutic duplication and drug-drug interactions involving beta-agonist inhaler use by elderly individuals with chronic lung disease⁴.

Concerning this issue, the 3D Approach will benefit to create awareness among patients. It may also be used as a desk reference by the medical practitioners as a fast and easy method to explain the therapeutic duplication.

The 3D Table lists the various inhalers by their Generic and Chemical content with its Mechanism of Action to enable any detection, which will be alerted by the 'Red Alert Box'.

This would immediately alert the prescribing physician to rectify the situation.

References:

³ Mark Rubino, Annual Notification of Preferred Drug List Changes September 2006

⁴ Stuart B, Fahlman C. Outcomes of prospective drug-use review of beta-agonist inhaler use in an elderly Medicaid population Clin Ther. 1999 Dec;21(12):2094-112

Asthma

ASSOCIATION OF INTERLEUKIN-13 (IL-13) GENE POLYMORPHISMS WITH PLASMA IMMUNOGLOBULIN E (IgE) LEVELS AND IL-13 PRODUCTION IN MALAYSIAN ASTHMATICS: A PILOT STUDY

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Objectives:

This study was designed to identify the allelic frequency of the promoter region (-1111) and Arg130Gln (4257) of the IL-13 gene in Malaysian asthmatics. The purpose of this study is to evaluate the association between the single nucleotide polymorphisms (SNPs) in the IL-13 gene (-1111, 4257) with plasma IgE levels and IL-13 production.

Method:

Peripheral blood was taken from 90 asthmatic patients and 90 normal subjects recruited from the University Malaya Medical Centre. Plasma was isolated and quantification of IgE levels was done by ELISA. Genomic DNA was isolated and the region of interest was amplified by PCR. Restriction fragment length polymorphism was performed for determinations of

allelic frequencies of the two SNPs. Lymphocytes were cultured in the presence of mitogen and the supernatant was used for analysis of IL-13 production by ELISA. Statistical analysis was performed with SPSS using Mann-Whitney and Kruskal-Wallis tests where appropriate.

Results:

Allelic frequencies of the -1111C wildtype allele and the 4257G wildtype allele of IL-13 gene were 0.665 and 0.558 respectively in normal volunteers and 0.523 and 0.546 respectively in asthmatics. There was no significant association between the two SNPs with IL-13 production and plasma IgE levels. However, there is a significant association between genotype and plasma IgE levels and a significant difference in plasma IgE levels and IL-13 production between asthmatics and normal volunteers ($p < 0.05$).

Conclusion:

There is no association between the two SNPs (-1111, 4257) of the IL-13 gene with plasma IgE levels and IL-13 production in Malaysian asthmatics.

Asthma

COMPARISON OF TOTAL COST OF HEALTH SERVICES AMONG ASTHMATIC AND COPD PATIENTS IN UNI-SPECIALITY HOSPITAL WITH GENERAL HOSPITAL

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Objectives:

Based on econometric studies conducted worldwide and in Iran, one of the methods by which the efficiency and effectiveness of an organization is evaluated, is by cost-control methods and economical analysis of therapeutic activities that must be carried out routinely and periodically. It seems that services offered in uni-speciality hospitals are cheaper than general hospitals. This study aims to propose a model by which the provided services can be expanded in a specific field of treatment. Also this study was conducted to analyze and compare the costs of asthma and COPD in two general and uni-speciality hospitals in order to determine the total services costs of these two diseases.

Method:

This cross-sectional retrospective experimental study calculated hospital costs and analyzed the data in forms and tables designed especially for this purpose. Also data in regard to capital, current and verhead costs were collected. After calculation, the mean of total costs in both diseases was assessed.

Results:

In this study, econometric analyses of asthma and COPD demonstrated that the health services cost of asthma in a general hospital was 1.19 times greater than that of a uni-speciality hospital, while the services cost of COPD in a general hospital was 1.36 times that of uni-speciality hospital. The difference in costs includes duration of hospitalization, cost of Para clinical and diagnostic tests, counseling, medical equipments, and overhead costs.

Conclusions:

As it is observed all over the world, health care personnel pay less attention to the costs of medical equipment and are less aware of the economical aspect of health care services. Without considering the costs, physicians are always after new equipment. Having knowledge about the costs is not only essential for hospital administrators but also for all medical personnel, since with more cost reduction, a greater number of people



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can enjoy medical services.

Key words:

Economical evaluation, Uni-speciality hospital, General hospital, Total cost estimation, Overhead costs.

Bronchoscopy

ENDOBONCHIAL LIGNOCAINE AND COUGH SUPPRESSION DURING BRONCHOSCOPY: DOES CONCENTRATION MATTERS?

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Objective:

The control of coughing is paramount in achieving a meaningful bronchoscopy. Getting specimens as well as endobronchial visualization require minimal disturbance from cough. Data on the efficacy of different lignocaine concentration is lacking. We investigate the efficacy of 1% and 2% endobronchial lignocaine in suppressing cough during bronchoscopy.

Methods:

Following consent, patients undergoing bronchoscopy and bronchoscopists were all blinded to the concentration of endobronchial lignocaine solution used, either 1% or 2% for local anaesthesia of the larynx and bronchial tree using a standard bronchoscopy protocol. The procedure was performed by experienced respiratory physicians. The total number of cough during bronchoscopy was recorded using a tape recorder and analyzed by the main investigator.

Results:

51 patients were recruited and all of them completed the study. There were 26 patients in lignocaine 1% group and 25 patients in lignocaine 2% group. There was no statistically significant difference in the mean number of coughs ($p=0.749$) between lignocaine 1% and 2%. The total amount (volume) of lignocaine given to patients in the two groups were equal ($p=0.955$). The median dose of lignocaine given to patients in lignocaine 1% group was nearly half of that in lignocaine 2% group ($p<0.001$).

Conclusion:

There was no difference in cough suppression between the two lignocaine concentrations. The quantity of lignocaine 2% however was twice as much to achieve the same suppression.

Bronchoscopy

WHAT CONCENTRATION OF ENDOBONCHIAL LIGNOCAINE DOES PATIENT PREFER DURING BRONCHOSCOPY? A RANDOMIZED CONTROLLED TRIAL

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Objectives:

Patients tolerance of bronchoscopy depends largely on the effectiveness of local anaesthesia. There has not been any study that compares the different concentration of endobronchial lignocaine towards patient satisfaction and preference. Lignocaine 1% and 2% was used to assess patient satisfaction and preference during bronchoscopy.

Methods:

We conducted a prospective, randomized controlled study involving patients undergoing bronchoscopy. The patients were blinded to the concentration of lignocaine solution used. Patients were randomly assigned to receive either endobronchial lignocaine 1% or 2% for local anaesthesia of the larynx and bronchial tree. Experienced bronchoscopists performed the bronchoscopy following a standard protocol. After the completion of the procedure, patients charted their overall satisfaction, perceptions of cough, vomiting and choking on a 10-cm visual analogue scale (VAS) score.

Results:

A total of 51 patients were recruited. All of them completed the questionnaire. There were 26 and 25 patients in lignocaine 1% and 2% group respectively. Between lignocaine 1% and 2% group, patients overall satisfaction ($p=0.316$), perception of vomiting ($p=0.738$), choking ($p=0.373$) and coughing ($p=0.902$) did not show any statistical significance difference. The total median dose received by patients in lignocaine 1% group was nearly half of that in lignocaine 2% group which was statistically significant ($p<0.001$).

Conclusion:

The use of 1% and 2% endobronchial lignocaine resulted in similar patient satisfaction level during bronchoscopy. Patients did not show any preference to any of the two lignocaine concentration. The amount of lignocaine 1% used was much less to achieve similar patient satisfaction with lignocaine 2%.

Bronchoscopy

PLEUROSCOPY: HOSPITAL UNIVERSITI KEBANGSAAN MALAYSIA (HUKM) EXPERIENCE

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Background

HUKM is the first centre in Malaysia to perform pleuroscopy. Pleuroscopy is used for investigating and treating pleural diseases. The procedure is carried out under local anaesthesia and conscious sedation. A Flex-Rigid pleuroscope is used in our centre.

Methods

Pleuroscopy was carried out on thirteen patients between January 2006 until May 2007. Average age of the patients is 53 years old (range 22-75 years). Male = 8 and female = 5. Indications for the procedure were undiagnosed exudative pleural effusions ($n = 10$), pleurodesis ($n=2$) and evacuation of empyema ($n=1$).

Results

Nine out of thirteen patient underwent successful procedure where as four procedures were abandoned. Reasons for abandoning the procedure was failure to deflate the lung secondary to extensive adhesions in 3 patients and crowding of the ribs in 1 patient. Two out of 9 patients underwent talc pleurodesis for recurrent malignant pleural effusions. Confirmatory diagnoses were made in the remaining 7 patients. All nine patients required chest tube insertion after pleuroscopy. The duration of chest tube placement ranged from 3-4 days in patients undergoing diagnostic pleuroscopy. In the 2 patients who had pleurodesis the chest tube duration was 8 and 48 days. No major complication arose. Minor complications were mild pain at chest tube insertion site and minimal surgical emphysema.

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Conclusion

Pleuroscopy is a safe and efficient procedure for investigations and treatment of pleural disease.

Key words

Pleuroscopy, HUKM.

COPD

RELATIONSHIP BETWEEN THE SMOKING CESSATION AND FEV1 IN THE PATIENT WITH COPD

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Background:

COPD is the most common cause of mortality and disability due to pulmonary disease. Cigarette smoking is the most important risk factor for COPD and smoking cessation is the most effectiveness strategy for prevention and treatment of COPD. One of the nurs roles is education and counseling and the major goal for nursing intervention in this study may include help to smoking cessation in the patient with COPD.

Discussion:

Cigarette smoking is the most important risk factor of COPD and the most effectiveness nursing intervention for prevention of COPD is education and counseling to smoking cessation.

In Iran 200,000,000 dolars in year costes for cigarette smoking. 27.3% of mans and 3.4% of womans smoking in Iran and the mortality of cigarette smoking was 50,000 case in 1999.

Dejong and veltman in 2004 found 44% of patient with COPD were counseling by clinical nursing specialist cessated cigarette smoking. Saily and others in 2004 found reducing smoking rate were in counseling patient with COPD was 57.9% (P=0.001) and the rate of increasing forced exoiratory volume (FEV₁) in patient with COPD was 13.2% (P=0.006).

Conclusion:

Cost of chronic diseases is very much. While prevention and treatment of chronic diseases through educational nursing is the one of the most important strategical intervention.

Keywords:

COPD – Smoking cessation – FEV₁

COPD

POOR CORRELATION BETWEEN FORCED EXPIRATORY LUNG VOLUME IN 1 SECOND (FEV1) AND QUALITY OF LIFE IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Introduction:

FEV1 is considered the most objective measurement of airflow obstruction that is available. It is standardised, accurate and reproducible. It is the best predictor of progress and mortality in Chronic Obstructive Pulmonary Disease (COPD) and is used to determine the severity of COPD. However FEV1 may be a poor predictor of disability and quality of life.

Objective:

To assess the correlation between FEV1 and quality of life measured

by St George's Respiratory Questionnaire (SGRQ) in COPD patients in Malaysia.

Methods:

28 patients with a diagnosis of COPD who recently underwent spirometry were identified and asked to complete a SGRQ.

Results:

There was no significant correlation between FEV1 and total score of SGRQ (r=-0.96, p=0.62). There was also no significant correlation between FEV1 and the three components of symptoms (r=-0.25, p=0.19) activity (r=0.83, p=0.67) and impact (r=-0.58, p=0.77) in the SGRQ.

Conclusion

FEV1 correlates poorly with quality of life in COPD patients in Malaysia. Other measurements of lung function may be more reliable in assessing quality of life in this group of patients.

COPD

GERD AND ANXIETY IN PATIENTS WITH SEVERE COPD

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Objectives:

To detect the impact of anxiety on shaping the prevalence of gastro-intestinal reflux disease (GERD) in patients with severs chronic obstructive pulmonary disease (COPD).

Methods:

We examined the prevalence of symptomatic GERD, using the Vigneri score, in 29 male patients with COPD. Esophageal 24 h pH monitoring was used to document the diagnosis of GERD in symptomatic group. Beck Anxiety inventory was used to detect the impact of anxiety on expressing GERD symptoms.

Results:

Reflux disease symptoms were recorded in eighteen patients of the studied group (62%). GERD was diagnosed, based on esophageal 24 h PH monitoring, in only 11 patients of those who expressing symptoms of GERD. Mean of Anxiety score was correlated significantly with the number and frequency of symptom presentation in patient with symptoms of GERD reflecting the attribution of differnt symptoms of anxiety to the GERD syndrom. Also Anxiety scores correlated positively with time (total) PH reflecting the effect of anxiety on the sverity of GERD syndrom.

Conclusion:

Patients with severe chronic obstructive pulmonary disease have a high prevalence of symptomatic gastro-oesophageal reflux. However True GERD was documented in a fewer number of them. Psychological factors, such as anxiety and somatisation may play a role, particularly in those patients without esophageal inflammation.

Critical Care

A COMPARITIVE STUDY OF NON INVASIVE POSITIVE PRESSURE AND MECHANICAL VENTILATION IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Outcome of invasive mechanical ventilation (IMV) in patients with chronic obstructive pulmonary disease (COPD) is disappointing with reported survivals between 20% and 50% associated with difficulties in weaning and ventilator associated pneumonia (VAP). There is currently great

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interest in the use of non-invasive positive pressure ventilation (NIPPV) in management of acute exacerbations of COPD.

Objective:

To compare the clinical course and outcome NIPPV versus conventional IMV in patients with acute exacerbation of COPD.

Method:

Hospital based prospective study over a 20 months period between April 2005 and November 2006. Twenty five patients who met the inclusion criteria and treated with NIPPV constituted the study group. Age, sex and disease matched patients treated with IMV earlier formed the controls. Details of duration of hospital stay, complications like VAP, difficulty in weaning, requirement for tracheostomy and mortality were documented.

Results:

Serious complications related to intubation like VAP [17 (62.9%)], difficulty in weaning [21 (77.7%)], tracheostomy [9 (33.3%)] were not seen in patients receiving NIPPV. Duration of stay in the intensive care was statistically significant between the groups (3.48 vs 15.5 days). There were 3 patients with treatment failure in the study group who could not tolerate the pressure applied through the mask or developed claustrophobia requiring IMV but no mortality. There were 3 deaths in the control group.

Conclusion:

Non invasive ventilation is associated with shorter ICU stay and the serious complications in particular related to intubation are not seen in NIV. Intolerance to NIV was mainly due to pressure effects.

Diseases of the Pleura

EXPRESSION OF C-MET IN MALIGNANT PLEURAL MESOTHELIOMA; AN IMMUNOHISTOCHEMICAL STUDY

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Background:

Most patients with malignant pleural mesothelioma present in advanced stages of disease, response rates and survival with currently available therapies are poor. Therefore, it is critical to identify the molecular markers of mesothelioma which would provide a way of understanding this neoplasm and targeting these markers in therapy.

Objectives:

To assess the immunoreactivity of c-Met in malignant pleural mesothelioma (MPM) and to analyse the potential link of the c-MET expression to the size and grade of tumor or MPM patients survival.

Methods:

A total of 20 patients (7 female & 13 male) with pathologically confirmed MPM; age range, (35 to 63 years) were included in the study. The patient records for the clinical, radiological and laboratory investigations and the results of closed pleura biopsies (CPBs) were analyzed. Pleura biopsies were stained for c-Met using immunohistochemical technique applied to paraffin sections.

Results:

Of the studied tumors 18 (90%) were immunoreactive for c-Met. There were no significant relations between c-Met and patient age ($p=0.098$) or gender (0.274) also there was no relation between c-Met expression and clinical symptoms. All tumors that showed distant metastasis were c-Met positive. While all c-Met negative tumors showed no metastasis. However the difference was statistically insignificant. There was also no relation

between c-Met and tumor subtype ($p=0.40$) or tumor stage ($p=0.57$), however all T3 and T4 tumors were c-Met positive and the two c-Met negative tumors was of T2. The 2 patients showed one-year survival, were c-Met negative. However, again the difference was statistically insignificant ($p=0.52$).

Conclusion:

c-Met may have a significant role in the development of MPM. It may have prognostic value and could be a beneficial target for therapy.

Diseases of the Pleura

PNEUMOTHORAX IN A NEONATAL INTENSIVE CARE UNIT: AN AUDIT

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Pneumothorax causes of acute deterioration of a neonate in a neonatal intensive care unit (NICU). Prompt recognition and treatment of this condition is life-saving.

Objective:

To study the etiology, clinical course and outcome of neonates with pneumothorax in a NICU.

Methods:

Retrospective study of neonates with pneumothorax in Level II NICU between January 1999 and September 2006. Neonates with no radiological confirmation were excluded.

Results:

Study group comprised of 20 neonates with male to female ratio of 1.8:1 and mean birth weight of 2282 grams. 60% were term, 30% preterm and 10% post term. Primary etiology included pneumonia and sepsis (40%), hyaline membrane disease (25%), meconium aspiration syndrome (15%) and congenital diaphragmatic hernia (10%). The mean age in hours at diagnosis was 68.05 and was not statistically significant for the ventilated preterm (62.33 hours) and term (47.14 hours). 80% required positive pressure ventilation post-pneumothorax out of which 44% were on ventilator when pneumothorax occurred. In 60% the pneumothorax was right sided, in 25% left and in 15% bilateral. There was recurrence in 15% and evidence of other air-leaks in 10%. In 70% the pneumothorax was due to the primary etiology. In a significant 85%, the diagnosis was radiological and not clinically suspected. 80% required intercostal chest tube drainage. Mortality was 45% determined mainly by the primary etiology and other co-morbid conditions.

Conclusion:

Detection of pneumothorax in neonates depends on high index of suspicion and knowledge of its predisposing factors in different gestational age groups.

Epidemiology

CORRELATION OF PEAK EXPIRATORY FLOW RATES WITH DERIVED ANTHROPOMETRIC VARIABLES OF SCHOOL GIRLS FROM COASTAL INDIA

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Peak expiratory flow rate (PEFR) as assessed by peak flow meter is important to predict airway obstruction and assess reversibility. Epidemiological studies on PEFR are important to establish regional nomograms.

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Objective:

To study PEFR in healthy school girls of Mangalore, coastal India, between 6 and 13 years and to correlate PEFR with derived variables like body surface area (BSA), body mass index (BMI) and fat free body mass (FFB).

Methods:

A cohort of 1937 girls constituted the study group. Age, weight, height and skin fold thickness over triceps and calf were recorded using standard equipments and procedure. Best of three attempts of PEFR using Wright's Mini Peak Flow Meter was taken. BSA, BMI and FFB were derived from accepted formulae. Bivariate regression equations were obtained with PEFR and those variables which had significant coefficient of correlation ($r > 0.5$). Regression equations with best predictor variable and their combinations were derived.

Results:

BSA and FFM correlated linearly with PEFR. Linear regression equations derived for PEFR using these independent variables were $-55.028+291.28$ (BSA m^2) and $34.948+8.511$ (FFB in kg) with correlation coefficient of 0.908 and 0.881 and standard error of estimate of 27.409 and 30.941 respectively. Multiple regression equations were derivable only for FFB with age, weight and height.

Conclusion:

Epidemiological studies on PEFR require assessment of all factors that influence it. In pediatric population more non static factors come into arena due to physiological growth. Hence reference values should be derived in the population taking into account all relevant non-static factors.

Epidemiology

TUBERCULOSIS IN IRANIAN PRISONERS, AN EPIDEMIOLOGIC STUDY

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Introduction:

TB is leading cause of death from infectious diseases in adults and responsible for an estimated 2 million preventable deaths each year [1]. although any one can develop TB by inhaling infectious particles; the disease particularly attacks young adults in economically disadvantaged populations. Prisons have often been cited as possible reservoirs of TB, although in fact there is limited concrete data. There are many reasons for this lack of data, but they often reflect the low priority attached to the problem and to data collection. However where data are available .much higher levels of active TB disease are reported from prisoner populations compared to that reported from the civilian population. HIV exacerbates the already increased risk of TB in incarcerated populations. in one study in Brazil [2]the incidence of active TB in incarcerated women was found to be 9.9 per 100 person-years for the HIV-infected as opposed to 0.7 per 100 person-years in those infected with HIV[2]. True rates of drug resistant tuberculosis (TB) throughout the world remain unknown, particularly in regions where the TB burden is greatest. This has been due principally to methodological problems including the absence of longitudinal studies to detect trends, the failure to differentiate primary and acquired drug resistance in studies, the selection bias of many surveys, and the absence of high quality laboratory culture facilities.[3][4]

Materials And Methods:

This cross sectional survey was conducted over 1 year in 26 states of Iran. Consecutive TB patients aged over 18 years attending the institutions during the study periods were invited to take part and all participants gave informed written consent. Only those patients with bacteriologically proven TB who had viable Mycobacterium tuberculosis cultures were included for analysis. In this study 339 prisoners (known cases of TB) were participated and checklist of each patient completed according to her or his prison hygiene resume. All of completed checklists were collected and processed with SPSS 11

Results:

In this study 339 prisoners from 26 states of Iran, known cases of TB, were evaluated. All of them were upper 15 years and except two people others were male. 259 patients were new cases of TB, 11 patients had relapsing disease after discontinuing of treatment, and 21 patients had TB from out of prison. in microbiological studies 224 cases were smear positive ,54 cases were smear negative, and 52 cases had extra pulmonary disease. 83 cases were HIV positive in same time.196 cases received treatment in last 6 months whom 41 cases were cured. in 50 cases treatment were completed .4 cases were died from TB,8 cases were died from other diseases,6 cases were died from unknown etiology,3 cases had failure of treatment,1 cases refused from treatment and in 49 cases patient transferred to another prison. Treatment efficacy ratio was 84.4%.

Discussion:

Tuberculosis is an infectious disease caused by the mycobacterium tuberculosis [5]. TB can affect any organ of the body, but most commonly attacks the lungs (pulmonary TB).prisoners often housed in overcrowded facilities with inadequate ventilation, hygiene and sanitation [6]. Food can be unappealing and nutritionally inadequate. Health services may be weak or absent [7]. Illegal behavior such as the use of alcohol, drugs or sexual activities (with or without consent) may continue unchecked. This concentration of risk factors can ignite TB epidemics that are not restricted to the confines of a prison [8]. If TB in prison is to be controlled effectively, all of these factors must be acknowledged and addressed wherever possible [9]. In our study we found that Iranian prisoners who morbid from TB had no good follow-up systems and some of them lost their medical resume in transference. We suggest that a systematic follow-up must be created to evaluate and rechecking treatment

Reference:

1. dye C et al: consensus statement. Global burden of tuberculosis : estimated incidence. prevalence and mortality by country. WHO Global surveillance and monitoring project.Journal of the American Medical association 2003;282(7):677-86
2. Ferreira MM, et al: Tuberculosis and HIV Infections among female inmates in SaoPaulo, Brazil :a prospective cohortstudy.journal of acquired immune deficiency syndromes and human retrovirology 2001;13(2):177-83.
3. Varelzdis BP, Grosset J, de Kantor I, et al. Drug-resistant tuberculosis: laboratory issues. World Health Organization recommendations. Tuberc Lung Dis 1999;75:1-7
4. World Health Organization. Anti-tuberculosis drug resistance in the world, Report from the WHO/IUALTD Global Project on Anti-tuberculosis Drug Resistance Surveillance, 2003:118-9.
5. Levy M:prison health services.British journal 2001;315:1394-5.
6. Pio A: Tuberculosis handbook, who/TB/98.253.Geneva,World Health Organization, 1998.
7. Nyango DS et al:Tuberculosis in aprison population in Malawi.Lancet 1997;350(9087)1284-7.
8. Kending N:Tuberculosis control in prisons international journal of tubersulosis and lung disease 2003;2(9 suppl 1):s57-63.



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Epidemiology

SURVEY ON THE LEVEL OF KNOWLEDGE AND PRACTICE OF BARBERS IN PREVENTING AIDS IN IRAN, DEZFUL

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Objective:

AIDS is a special viral infection for which there is not suitable treatment planning therefore prevention is the most important priority. Because one way of transmission is body injury with sharp contaminated instruments, and barbers usually use those instrument. Therefore this study has been conducted to determine the level of the Knowledge and practice of barbers about method of preventing AIDS in Dezful

Methods:

This study is a conservative analytic investigation. Sample size (n = 100) was selected from barber in Dezful. The data were collected by a question naire that was completed by barber. The Results showed that 8% of barbers have low Knowledge, 53% have average knowledge and 39% have high Knowledge. 29% of barber have low practice 50% average and 21% suitable practice.

According to the Result of this study, barbers' Knowledge and practice were poor. Therefore, a different educational method is necessary to promote their Knowledge and practice.

Results:

The finding showed that among the barbers 8% had low Knowledge, 53% average and 39% appropriate Knowledge concerning AIDS prevention. 29% had had low practice, 50% average and 21% appropriate practice.

Discussion:

Regarding the Results of the study, since barber have low Knowledge and practice, different educational method should be handled to promote their Knowledge and practice.

Interstitial Lung Disease

ELECTRODIAGNOSTIC STUDY OF PHRENIC NERVE FUNCTION IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives :

21 patients with SLE were screened for the presence of Phrenic nerve neuropathy and to determine whether neurophysiologic findings correlate to clinical respiratory signs, spirometric abnormalities or serological examination in patients with Systemic lupus erythematosus.

Method:

A total of 21 patients (18 female & 3 male) with systemic lupus erythematosus (SLE) (age range, 16-36 yr) were included and studied by physical pulmonary examination, chest radiography, respiratory function tests, as well as serological examination and bilateral transcutaneous phrenic nerve conduction studies.

Results:

14 (66.6%) patient complained of dyspnea, only one patient showed paradoxical abdominal movement. Pulmonary function tests showed proportional reduction of the forced vital capacity (FVC) and forced expiratory volume in 1 second (FEV1), suggesting a restrictive process which was severe in 23% of patients. All patients were on corticosteroids, only 10 (47.6%) patients were on immunosuppressive medication to include methotrexate or cyclophosphamide. Phrenic nerve evaluation

using transcutaneous stimulation studies showed delayed latencies of RT, LT & both phrenic nerve in 17 (81%), 19 (90%) and 17 (81%) patients respectively confirming a demyelinating neuropathy. Also Phrenic nerve stimulation evoked a low-amplitude response from the right, left and both in 17 (81%), 15 (71%) and 14 (66.6%) of patients respectively confirming axonal neuropathy. There was no significant correlation between electrical phrenic nerve stimulation and serum immune markers, except there was decreased action potential amplitude in SLE group with positive results for Anti DNA as 14 (66.6%) of patients had Anti DNA +ve, all showed reduced amplitude of rt phrenic nerve & 13 (93%) of them showed reduced amplitude of lt phrenic nerve. Fourteen (66.6%) patients presented with dyspnea and all of them showed abnormal phrenic nerve conduction studies. While 11 patients showed abnormal CXR with small but clear lung fields, no evidence of major parenchymal lung or pleural disease was found. There was no significant correlation between electrical phrenic nerve stimulation and CXR abnormalities.

Conclusions:

Diaphragmatic weakness in patients with SLE is both common and is very likely to be caused by a phrenic neuropathy with evidence of bilateral involvement.

Interstitial Lung Disease

BRONCHIOLITIS OBLITERANS ORGANIZING PNEUMONIA ASSOCIATED WITH JUVENILE DERMATOMYOSITIS - A CASE REPORT

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Interstitial lung disease is a rare presentation of juvenile dermatomyositis (JDM). Bronchiolitis obliterans organizing pneumonia (BOOP) is a pathologic entity characterized by formation of plugs of fibrous tissue in bronchioles and alveolar ducts. Documented reports of BOOP in pediatric patients with JDM are limited.

Objective:

We report a 5 year old male child who presented with subacute respiratory illness due to BOOP, strengthening the association of this entity with JDM.

Method:

Clinical diagnosis of JDM with BOOP was confirmed; treatment instituted with follow-up for 2 years.

Result:

The first offspring of non-consanguineous parents, with normal growth and development appropriate for age, presented with symptoms of progressive weakness of limbs and difficulty in breathing twelve months prior referral to our centre. Computed tomography (CT) of the chest suggested BOOP but was not treated. At presentation he had heliotrope rash, generalized digital clubbing, tachypnoea and bilateral proximal muscle weakness. Muscle enzyme elevation and biopsy confirmed JDM. Repeat CT scan chest revealed progress of the disease process. IgE was elevated. Anti-nuclear antibody was positive with a homogenous pattern. dsDNA and Jo-1 antibody were negative. Child responded to corticosteroid and methotrexate therapy. Presently he is in remission on oral weekly methotrexate.

Conclusion:

Early recognition of facial rash and muscle weakness in a child with respiratory symptoms may represent JDM with BOOP and warrant aggressive treatment for resolution of pulmonary symptoms and

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remission of the rheumatological illness. This is probably the first pediatric case report where therapeutic response to methotrexate is seen.

Interstitial Lung Disease

SINO BRONCHIAL DISEASE IN BLIND SIBLINGS: A REPORT

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Panbronchiolitis is a serious lung disorder characterized by inflammation of respiratory bronchioles, often in association with chronic sinusitis mainly reported from Japan in adults over forty. Etiology of this disorder is not understood, but symptoms are reversible with early macrolide therapy.

Objective:

To present a report of blind siblings with chronic lung disease and the outcome.

Method:

A 16 year old male, born of non consanguineous marriage presented with history of low grade fever, cough with copious sputum of two months duration with no postural variation. He was born blind with past history of mild persistent asthma since late childhood. His 13 year old sister also blind with renal anomaly, had significant past history of recurrent lower respiratory tract infection. Examination in both showed normal growth, intelligence and bilateral sclerocornea. There was no clubbing. Maxillary sinus tenderness and bilateral basal coarse crepitations were present. High resolution computer tomogram chest was suggestive of panbronchiolitis in the index case and bronchiectasis in the sibling. Spirometry and serum IgE and alpha 1 antitrypsin levels were normal. Cold agglutinins were negative. Rheumatoid factor and anti nuclear antibody were negative. The boy was started on daily low dose of oral erythromycin.

Result:

In the one-year follow-up there is clinical and radiological improvement.

Conclusion:

Identification of panbronchiolitis is important as response to oral prophylaxis with a drug which is easily available is remarkable.

Interstitial Lung Disease

ROLE OF VITAMINS C AND E IN PREVENTION OF HEXAVALENT CHROMIUM-INDUCED PULMONARY FIBROSIS IN RAT

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Many studies have shown that Hexavalent chromium (Cr^{6+}) compounds cause variety of toxicity such as carcinogenic effect and pulmonary fibrosis. The aim of this study was to investigate the effect of vitamins C and E on hexavalent chromium-induced lung fibrosis in animal model. Rats weighing 180-210g were used during the study. The negative control group received a single dose of 0.2ml intratracheal normal saline. Other groups were given single intratracheal instillation of 50mg/kg sodium dichromate in saline vehicle and then treated with either vitamin C or E. Vit C group treated with 75mg/kg/day vit C orally, Vit E group treated with 20mg/kg/day vit E orally. Vit C+E group treated with 75mg/kg/day vit C + 20mg/kg/day vit E orally. Three weeks after such treatments

animals were killed, lungs were removed for histology and biochemical investigation. Hexavalent chromium caused marked alveolar thickening associated with fibroblasts and myofibroblasts proliferation and collagen production in interstitial tissue leading to pulmonary fibrosis. Administration of vitamins C and E impaired fibrotic damages in lung tissue. The combination of vit E and C had more pronounced effect. Collagen and hydroxyproline contents of lung tissue were determined using spectrophotometric methods on 500nm. Results are shown in the table below:

	Negative control	Positive control	Vitamin C	Vitamin E	Vitamin C+E
Lung weight (g)	1.33± 0.021	1.56± 0.021	1.5± 0.025	1.48± 0.03	1.46± 0.021
Hydroxy-proline(µg/g)	185.8± 25	705± 132	702± 151	463± 82	290± 61

From this study it can be concluded that co-administration of vit C & E may significantly diminish the toxic effects of bleomycin on lung.

MDR-TB

SUSCEPTIBILITY TESTING OF MYCOBACTERIUM TUBERCULOSIS ON BACTEC MGIT 960 WITH SECOND-LINE ANTIMICROBIALS

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Objective:

To standardise the basic protocol and establish critical concentrations for five second line drugs viz. Kanamycin, Capreomycin, Ofloxacin, Ethionamide and Para Amino Salicylic Acid (PAS) on MGIT 960 system, in the Indian context using BACTEC 460 TB system as comparator.

Methods:

Stock solutions of all the drugs were prepared as per calculation and aliquots were stored at -70. The study was carried out in 3 phases using 3 different concentrations of each drug as follows

Phase I: 11 susceptible *M. tuberculosis* complex isolates including H37RV (ATCC 27294)

Phase II: 20 resistant *M. tuberculosis* complex isolates

All the *M. tuberculosis* complex isolates used in phase I and II were confirmed by PNB/NAP and in-house molecular method.

Phase III: 73 cultures- fresh and stock *M. tuberculosis* complex isolates selected from MDR isolates resistant to other second line drugs.

All the *M. tuberculosis* isolates used in phase III were confirmed by PNB/NAP method.

Results:

All 5 drugs had MIC's ranging from 1-5 mg/ml. Drug susceptibility testing in phase I by MGIT yielded reproducible results. Kanamycin, Ofloxacin, and PAS were comparable by MGIT & BACTEC 460 TB system. Critical concentrations in MGIT for Capreomycin and Ethionamide had to be increased to 2.5 and 5 respectively.

Conclusion:

Final Critical Concentrations for MGIT are Kanamycin 2.5 µg/ml, Capreomycin 2.5 µg/ml, Ofloxacin 1 µg/ml, Ethionamide 5 µg/ml and PAS 4 µg/ml.