248. Treatment of asthma, bronchiectasis and cough: inhaler use

P2161 Effect of fluticasone furoate (FF) and vilanterol (VI), separately and in combination (FF/VI), in an allergen challenge model
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Introduction: FF and VI are respectively, a novel inhaled corticosteroid and long-acting β agonist. FF is efficacious in asthma over 24h as monotherapy and combined with VI.

Objectives: Evaluate the effect of FF/VI on the allergen-induced early and late asthmatic response (EAR/LAR) and airway hyper-responsiveness (AHR) relative to placebo (PBO) and individual components.

Methods: Randomised, double-blind, 4-way crossover study of 27 mild asthma patients who received FF (100mcg), VI (25mcg), FF/VI (100/25mcg) and PBO once daily for 21 days (4 periods). Allergen challenge was performed on Day 21 of each period 1h post dose. AHR was assessed 24h later by PC20 methacholine challenge.

Results: FEV1 maximum decline during EAR (0-2h post-challenge) was significantly less with FF/VI and FF vs PBO.Treatment differences in minimum FEV1 (mL, 95% CI) vs PBO were -477 [−584,-369] and -77 [−189,85] mL for FF/VI and FF, respectively. For LAR (4-10h post-challenge) weighted mean (mL/ FEV1) was greater with all therapies vs PBO: 484 [332,636], 484 [330,638] and 168 [9,638] for FF/VI, FF and VI, respectively. Significant differences during EAR and LAR were seen for FF/VI vs VI with wFEV1, and during EAR for FF/VI vs FF for maximum FEV1; decline. Allervation of AHR relative to PBO was seen with FF/VI (2.43 doubling doses [1.65,3.21]) and FF (1.62 [0.88,2.41]) but not VI (0.26 [−0.55,1.07]).

Conclusions: FF/VI and FF protected from all components of the asthmatic response. Overall FF/VI provided superior protection from the response to inhaled allergen than monotherapy, with bronchoprotective effects lasting for over 24h.

Fundied by GSK (HZA111326; NCT0128595).

P2162 How frequent is bronchodilator reversibility in patients with stable asthma bronchiale and chronic obstructive lung disease (COPD) receiving maintenance therapy?
Veronika Muller, Gabriella Galfy, Marta Oroz, Zuzanna Kovats, Gyorgy Lonozy, Lilla Tamasi. Department of Pulmonology, Semmelweis University, Budapest, Hungary

Lung function measurement is the most important tool in the diagnosis and differentiation of obstructive lung diseases. While asthma is characterized by variable bronchial obstruction, increase of airway resistance is mostly irreversible in patients who had had the diagnosis for > 12 years or asthma (FVC: 2,38 ± 0,21 vs. 2,13 ± 0,22, p < 0,05), and 35% were not using a bronchodilators as well as their maintenance drug and 35% were not using a cort SMART® Turbuhaler®), 160/4.5 mg s/sx 1x2 and 2x2, plus as-needed BUD/FORM, in asthmatics ≥ 18 y with symptoms when treated with ICS/LABA. Mean age of patients was 48 y, (range: 18–96 y) and 62% were females. The effects of biological age, age when asthma was first diagnosed, and duration of asthma were assessed. Among 8053 randomised patients, 4402 (54.6%) were ≥ 30 y of age when first diagnosed and 3411 (42.3%) had had asthma for > 15 y. Data on allergic status (rhinitis, conjunctivitis) were collected. Severe asthma exacerbations were defined as: need for oral steroids for ≥ 3 days, emergency room treatment or hospitalisation.

Results: Presence of the allergic component decreased with increasing age at first asthma diagnosis. Patients ≥ 65 y had more exacerbations, and the risk of a first severe exacerbation was increased by 55.3% (p<0.001; HR=1.553; 95% CI 1.249, 1.931). Severe asthma exacerbations were more frequent in patients diagnosed > 30 y of age (p=0.0167; HR=1.248; 95% CI: 1.040, 1.477) and more frequent in patients who had had the diagnosis for > 15y (p=0.0021; HR=1.289; 95% CI 1.107, 1.582). However, there were no differences in time to first exacerbation between the two randomised treatments 1x2 and 2x2 inhalations in any of the three age measures.

Conclusion: Older patients, those with higher age at diagnosis and patients with long-term asthma have more exacerbations but did not show any difference between the 1x2 and 2x2 groups.

P2164 Patient and physician perspectives on asthma control and management strategies are discordant; a primary care survey in Canada
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Background: Patients and physicians' evaluations of asthma are often discordant. We undertook this study to compare prescribed management strategies to patients' actual strategies.

Methods: In 136 primary care practices, patients with asthma described their control using the asthma control test (ACT), current medication use, number of caregivers and health care utilization. Their physicians provided their understanding of each patient’s care while blinded to the patients’ responses.

Results: Of 904 patients (65% women, 21% current smokers), 54% had ACT scores < 20 although only 9% would describe their asthma as poorly controlled or uncontrolled. By contrast, 73% of physicians felt that the majority of patients had achieved control. In the 12 months prior, urgent care for uncontrolled asthma was obtained by patients in the following settings: 32% in their physicians’ offices; 19% at a walk-in clinic; 13% in the emergency room; and 3% in hospital. 21% of respondents had received at least one short course of prednisone. Of 247 patients described by their physicians as taking single maintenance and reliever therapy (SMART) only 60 (25%) used medications consistent with this regimen, 39% had separate relievers as well as their maintenance drug and 35% were not using a budesonide/formoterol inhaler.

Conclusion: Physicians overestimate the asthma control achieved by their patients; in Canada, patients are commonly uncontrolled and have frequent need for urgent asthma care. Physicians have not successfully implemented SMART therapy, either because prescribing is confounded by other caregivers or because physicians misunderstand the strategy.

P2165 Helotherapy – A possible method to enhance airway treatment on patients with obstructive pathology
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Introduction: The clinical benefits of halotherapy is advocated, but the mechanisms are scarcely studied and there is not enough available clinical data. Halotherapy may influence mucociliary, antibacterial and anti-inflammatory actions, also the immunomodulator - hyposensibilizing agents. We conducted a prospective study where we use a dry-sal salt inhaler on patients with asthma and COPD.
**P2166**

**Safety and efficacy of ectoine inhalation solution in patients with inflammation and airway obstruction: The EFC study**

Roman Berndt1, Ulrich Sydick2, Andreas Bilestein1, Alessandra Marin2, Thomas Jaenicke1, Gabriele Seiner-Sorge2, Sabine Stolz2, Jean Krutmann1, Ursula Kramer1, Klaus Unfried1, 1K & D, Bioph AG, Witten, Germany; 2Leibniz Research Institute of Environmental Health, IUF, Dusseldorf, Germany

**Introduction:** Ectoine is a compatible solute used for symptomatic treatment of chronic respiratory diseases, inflammatory dermatoses and irritated epithelia. Results from different studies demonstrated the efficacy of ectoine in reducing inflammation in the airways. Based on the positive results of a trial with asthmatic patients a study was set up to evaluate Ectoine Inhalation Solution (EFS) in subjects with mild to moderate airway obstruction and inflammation.

**Methods:** The study was designed as double blind, placebo-controlled cross-over trial. Subjects were randomly assigned to EFS or placebo (0.9% saline). Primary endpoint was defined as reduction of inflammatory markers IL8, CRP, LTB4, and granulocytes. Results from different studies showed a significant reduction of IL8 and CRP in subjects treated with Ectoine Inhalation Solution.

**Results:** The study revealed an improvement of all spirometry parameters after 12 weeks of treatment with Ectoine Inhalation Solution. Other outcomes included a significant reduction of inflammatory markers IL8, CRP, LTB4, and granulocytes.

**Conclusions:** Inhalation of Ectoine can reduce inflammatory markers and shows an excellent safety profile. The results of the EFC study support the outcome of other studies that the membrane stabilizing Ectoine reduces epithelial inflammatory processes. Further studies are necessary.

**P2167**

**Lebrikizumab reduces serum periostin in asthma patients with elevated baseline periostin**

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**Background:** Periostin is a matricellular protein induced in airway epitelium by interleukin-13 (IL13) and a good systemic biomarker for IL13 activity. Lebrikizumab, a humanized monoclonal antibody, binds IL13 and improved lung function in moderate-to-severe asthma patients (pts) with elevated baseline serum periostin in a Phase II study.

**Aims:** To examine the effect of blocking IL13 on systemic periostin levels in pts with uncontrolled asthma, despite inhaled corticosteroids.

**Methods:** Pts (n=218) were randomized to lebrikizumab 250 mg (n=106) or placebo (n=112) SC every 4 weeks for 6 doses, with 12 weeks follow-up (NCT00930163). Serum periostin was measured at baseline and throughout the study. Pts were classified as perio-stin-high (≥median) or perio-stin-low (<median) based on baseline serum levels.

**Results:** PB-corrected reductions in periostin were evident after 1 week of lebrikizumab treatment. Periostin-high pts showed an increase of periostin high by 4% baseline reduction across all pts and 7.3% baseline reduction in periostin-high pts (p<0.001). At 12 weeks, periostin reductions were 9.7% (p<0.001) for all lebrikizumab-treated pts vs PB and 14.4% (p<0.001) in periostin-high pts. Periostin-low pts had no significant reduction in periostin (2.9%; p=0.3). This effect was sustained at Week 36. Most pts (>90%) who were periostin-low at baseline maintained the periostin levels <median, whereas 72% of periostin-high pts treated with PB and only 40% treated with lebrikizumab maintained periostin levels ≥median at Week 12.

**Conclusions:** Lebrikizumab reduced serum periostin in periostin-high, but not periostin-low pts vs placebo. These data suggest that in asthma pts, elevated serum periostin levels are dependent on IL13 activity.

**P2168**

**Can roxithromycin improve quality of life in bronchiectasis patients?**

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**Introduction:** Azithromycin is an effective prophylactic antibiotic in non-CF bronchiectasis. However, it is known to cause side effects including hearing loss and liver dysfunction, necessitating appropriate patient monitoring. In addition, some experts advocate periodic tests of temporary cessation of treatment, “azithromycin holidays”, to minimise potential toxicity. We have examined our use of azithromycin and how we screen for complications in our specialist non-CF bronchiectasis clinic.

**Methods:** Data was collected on all patients with non-CF bronchiectasis who attended our specialist clinic over a 3-month period commencing 07/11/2011. In these patients receiving long-term azithromycin, we collected data on period of treatment, number of “azithromycin holidays” over the previous 12-month period.

**Results:** Seventy patients were studied, of whom 28 (40%) were prescribed long-term azithromycin. Of these, 7 (25%) had been on azithromycin for less than 12 months. Twenty three (82%) patients on long-term azithromycin had had LFTs and 1 (3.5%) had had audiometry testing in the preceding 12 months. Four (17%) of the patients treated for more than 12 months had had an “azithromycin holiday” in the preceding 12-month period.

**Conclusion:** Monitoring of LFTs was satisfactory in our treatment group but more attention could be paid to audiology testing and the possibility of “azithromycin holidays”. Work to raise awareness of optimal practice in long-term azithromycin prescribing in non-CF bronchiectasis is needed.

**P2169**

**An observational study assessing the practice of long-term azithromycin prescription in bronchiectasis patients**

Gareth Lynes, Catherine Morgan, Christopher Sheldon, Nicholas Withers.

**Respiratory Department, Royal Devon and Exeter NHS Foundation Trust, Exeter, Devon, United Kingdom**

**Introduction:** Azithromycin is an effective prophylactic antibiotic in non-CF bronchiectasis. However, it is known to cause side effects including hearing loss and liver dysfunction, necessitating appropriate patient monitoring. In addition, some experts advocate periodic tests of temporary cessation of treatment, “azithromycin holidays”, to minimise potential toxicity. We have examined our use of azithromycin in our clinic and how we screen for complications in our specialist non-CF bronchiectasis clinic.

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**Conclusion:** Monitoring of LFTs was satisfactory in our treatment group but more attention could be paid to audiology testing and the possibility of “azithromycin holidays”. Work to raise awareness of optimal practice in long-term azithromycin prescribing in non-CF bronchiectasis is needed.

**P2170**

**The p38 MAP kinase inhibitor dilmapimod ameliorates airway inflammation induced by ozone challenge in healthy volunteers**

Pavel Krystian1, Olaf Holz1, 2Ruth Tal-Singer2, Helga Maganness3, 1PRI, Pulmonary Research Institute at Hospital Grosshansdorf, Center for Pneumology and Thoracic Surgery, Grosshandorf, Germany; 2ITEM, Fraunhofer Institute for Toxicology and Experimental Medicine, Hannover, Germany; 3GSK, Glaxo Smith Kline, King of Prussia, United States

**Background:** p38 mitogen-activated (MAP) kinase may be involved in inflammation of airway diseases. We studied the effects of the selective oral p38 MAP kinase inhibitor SB-681323 (Dilmapimod) on airway inflammation induced by ozone challenge.

**Methods:** This was a double-blind, randomized, four-period, cross-over study with two doses of Dilmapimod (5 mg, 25 mg), Prednisolone (50 mg), and Placebo.
in healthy ozone responders (increase of neutrophils by >10% in sputum after inhalation of 250 ppb ozone for 3 hours with intermittent exercise). Study drug was administered 30 minutes prior to each ozone challenge. Induced sputum was collected 3 hours after the ozone challenge for measurement of neutrophils, interleukin-8 (IL-8), and myeloperoxidase (MPO). Treatment periods were separated by a 14 days wash-out.

Results: 16 subjects were randomized and 11 subjects completed all treatment periods. There was no evidence of a statistically significant difference for the number of neutrophils in sputum between Placebo and any active treatment. Relative to Placebo, statistically significant reductions of MPO and IL-8 levels in sputum supernatant were observed after treatment with Dimplapimod 25 mg and Prednisolone. Differences based on an exploratory population of 14 subjects with sufficient sputum quality indicated a statistically non-significant reduction of neutrophils by 38%, 31% and 26% in subjects treated with Prednisolone, Dimplapimod 25 mg and Dimplapimod 5 mg, respectively.

Conclusion: Dimplapimod ameliorates ozone-induced airway inflammation. Further studies in appropriate patient populations are needed.

The study was funded by GSK (GSK number SB-681323/10).

P2171 Effect of lidocaine and its delivery in chronic cough

Kayed Abdallah1, Jaclyn Smith1, Rachel Dockery1, Julie OShe1, Robert Murdoch3, Ashley Woodcock1.

Introduction: There were no consistently effective treatments for chronic cough. Patients frequently report an urge to cough sensation in the throat. Nebulised lidocaine has previously been reported to subjectively improve cough but there are no objective data.

Aims: To compare the effect of lidocaine throat spray, nebulised lidocaine and placebo on subsequent 10-hour ambulatory cough rate (Vitalojak®) and urge to cough visual analogue scores.

Methods: 20 patients with chronic cough completed a randomised double blind, placebo controlled, three-way crossover study. The different treatments were: Placebo: nebulised placebo followed by placebo throat spray Nebulised lidocaine (600 mg): nebulised lidocaine followed by placebo throat spray Throat spray Lidocaine (100 mg): nebulised placebo followed by lidocaine throat spray

Data were analysed using generalised estimating equation models.

Results: 26 patients completed (22 female, mean age 53.5 yrs, median cough duration 10 yrs). Median 10 hour cough rate (n=25) (coughs/hr; IQR) was nebulised lidocaine 34.4 (13.5–57) vs lidocaine throat spray 23.9 (12.5–58) vs placebo 32.7 (19–56). For the natural log transformed cough rate, there was significant difference between placebo and lidocaine throat spray (p=0.02), but not nebulised lidocaine (p=0.8), with most of the effect in the first 3hrs. Compared with placebo, both nebulised (p=0.01) and throat spray lidocaine (p=0.02) substantially reduced the urge to cough, but with no difference between them (p=0.6).

Conclusion: Throat spray lidocaine significantly reduced the 10-hour cough rate compared with placebo. This suggests that local treatment targeting the pharynx may be an effective anti-tussive in chronic cough patients.

P2172 Bidirectional modulation of urge to cough by nasal TRPA1 and TRPM8 agonists in healthy human subjects

Jana Plevkaová1, Marian Hajduch2, Juraj Kultan1, Lucie Fajkosová1.

Introduction: The role of trigeminal afferents which are stimulated in recent study we addressed the question of possible bidirectional modulation of cough response in human healthy volunteers by nasal challenges with TRPA1 and TRPM8 agonists respectively. After co-challenges with AITC, cinnamaldehyde, (-) menthol and (+) menthol (all 10-3 M, nasal symptom score, cough threshold (C2), urge to cough (Cu) and cumulative cough response had been tested).

Neurological challenge at TRPA1 relevant agonists induced considerable nasal symptoms, significantly enhanced urge to cough (p < 0.05) but modulation of C2 and cumulative cough response did not reach significance level. Both TRPM8 agonists administrated to the nose significantly modulated all parameters including C2 (p<0.05), Cu (p<0.01) and cumulative cough response (p = 0.001) documenting strong anti irritant potential of menthol isomers.

P2174 Progressive case of recurrent respiratory papillomatosis successfully treated with gefitinib

Vitaliajs Kolek1, Marian Hajduch2, Juraj Kultan1, Lucie Fajkosova1.

Introduction: Recurrent respiratory papillomatosis (RRP) or juvenile laryngeal papillomatosis is a rare disease, caused by human papilloma virus (HPV). It is characterized by epithelial neoplastic polyps in larynx, trachea (2–5%) and lungs (1%). Typical symptoms are hoarseness, chronic cough and dyspnea. Diagnosis is based on laryngoscopy, bronchoscopy, chest x-ray, biopsy and HPV testing. We describe a case of a woman with progressive laryngeal papillomatosis from the age of 1 year. Disease slowly progressed to trachea, although patient underwent about 80 endoscopic laser procedures. In the age of 37 y, chest X ray showed multiple nodules and cysts filled with fluid. VATS biopsy proved parenchymal papillomatosis. Patient was treated unsuccessfully with interferon, antiviral vaccine and Cedovifar. In the age of 41 y, therapy with gefitinib 250 mg bid was started. Bronchoscopy revealed regression of papillomas after 2 months and normal laryngeal and tracheal mucosa after 6 months. Chest X-ray was normal and CT showed tiny cysts without fluid. Patient felt well without dyspnea and tolerated treatment without problems.

Gefitinib - tyrosine kinase inhibitor of epidermal growth factor receptor (EGFR) was chosen according to knowledge of EGFR overexpression in papillomas and sporic information about treatment of children with laryngeal papillomatosis. To our knowledge, this is the first report of successful gefitinib treatment of RRP in adult patient. The role of HPV in tumor forming tissue reaction is not known. Frequent HPV detection in gefitinib-responsive lung adenocarcinomas gives another support for gefitinib indication in RPP and a new hope for patients, too.

P2175 Erdosteine – A new drug in the treatment of chronic rhinosinusitis

Ivo Štiler1, Jiri Hota1, Petr Schalek1, Renata Kelnerová2.

Introduction: Antiinflammatory macrolide antibiotics proved efficient in chronic rhinosinusitis (CRS). Since this medication is associated with potential side effects of the danger of development of resistant bacteria, alternative drugs are being sought.

Objectives: Another drug exerting similar, cytokine-mediated antiinflammatory response is Erdosteine. However, it has not been tested in this diagnosis yet. In a prospective post-authorisation study we therefore assessed the efficacy of Erdosteine in patients with CRS.

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P2173 A new rapid-onset dextromethorphan formulation for cough

Caroline Wright1, Rebecca Harcombe1, Rachel Thompson1, David Hall2, Jaymin B. Morjaria1, Alyon Morice1.

Background: Dextromethorphan (DEX) is known to be an efficacious anti-tussive agent. A novel DEX gel formulation (Arnold D®; Proctor & Gamble), with supra-oesophageal absorption, has been developed for fast relief from cough.

Aim: To evaluate the time to onset of action of 22mg DEX gel (equivalent to 30mg DEX) compared to standard 50mg oral DEX in a normal volunteer citric acid aerosol (CAA) induced cough model.

Method: Healthy subjects aged 18–65 years with a cough count between 7–20 coughs following five inhalations over 5 min. of 10% citric acid at screening were recruited. Subjects were administered oral DEX 50mg and at a subsequent visit at least 5 days later, DEX 22mg gel. Cough frequency was measured at baseline and at t = 15 min, 1, 2, 4 and 6 hours post dose.

Results: 42 (20 male) subjects were enrolled onto the study. At 15 minutes post dose there was a significant (p=0.001) difference in the mean (%SDEV) % reduction in cough from baseline of 32.1 (± 4.99) with DEX gel vs 12.8 (± 2.8) with oral DEX. Over the 6 hour time period (AUCmax) there was a significantly (p=0.02) greater % change in cough/ℓ following DEX gel AUCmax = −188.7 compared to oral DEX 50 mg, AUCmax = −114.2. There were no major safety issues.

Conclusion: In the evoked cough model, DEX gel has a faster onset of action compared to oral DEX and was more effective over the 6 hour time period despite there being a lower concentration of DEX in the gel preparation. A lack of binding due to different routes of administration may contribute to this effect. A buccal route of delivery with this formulation holds promise for this and other indications where rapidity of onset is required.

This study was supported by unrestricted grant aid from P+G.
Methods: 60 patients with CRS were enrolled, with 33 and 27 of them being treated by Erdosteine 2x300 mg without (group I) and with topical steroid (group II), respectively, for 3 months. Outcome measures included Sinonasal Outcome Test (SNOT-22) and nasal endoscopic score (Levine-May).

Results: A total of 572 patients were enrolled at 31 centres. Evaluation of basic inhaler techniques, showed common errors: omitting exhaling before inhalation (10-15%), mouth rinsing or incorrect inhalation (20%) and omission of mouth rinsing. Evaluation of asthma control was performed at baseline and following visits, 22% of asthma patients were under control at baseline, increasing to 43%.

Conclusion: This study collected information on specific use of inhaler devices in persistent asthma patients and a correlation in a balanced perception of use for every device by physicians and patients was shown.

P2178

The effects of different inhaler devices on asthma control in patients with persistent asthma in Turkey.

Aims: Persistent asthma is a chronic condition treated with continuous use of inhaler devices and stringent courses of follow-up as inhalers requires compliance and close follow-up. We aimed to investigate the effective use of inhaler devices in persistent asthma patients through patient and physician questionnaires.

Methods: Patient and physician questionnaires were implemented for basic application procedures of inhalers, including training. Physicians evaluation of asthma control was performed by ACT™.

Results: A total of 572 patients were enrolled at 31 centres. Evaluation of basic inhaler techniques; showed common errors: omitting exhaling before inhalation (10-15%), mouth rinsing or incorrect inhalation (20%) and omission of mouth rinsing. Evaluation of asthma control was performed at baseline and following visits, 22% of asthma patients were under control at baseline, increasing to 43%.

Conclusion: This study collected information on specific use of inhaler devices in persistent asthma patients and a correlation in a balanced perception of use for every device by physicians and patients was shown.

Table 1. Asthma treatment with inhalers. % of uncontrolled asthma (n=572 patients)

<table>
<thead>
<tr>
<th>Inhaler Device</th>
<th>V1, a (%)</th>
<th>not controlled</th>
<th>V4, a (%)</th>
<th>not controlled</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerolizer B+F</td>
<td>36 (42,8%)</td>
<td>12 (23,5%)</td>
<td></td>
<td></td>
<td>p=0.13</td>
</tr>
<tr>
<td>Discus F/S</td>
<td>58 (62,8%)</td>
<td>9 (11,4%)</td>
<td></td>
<td></td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Solution Spray BDPF</td>
<td>55 (52,7%)</td>
<td>6 (10%)</td>
<td></td>
<td></td>
<td>p=0.004</td>
</tr>
<tr>
<td>Turbhaler B/F</td>
<td>65 (61,7%)</td>
<td>13 (14,9%)</td>
<td></td>
<td></td>
<td>p=0.003</td>
</tr>
</tbody>
</table>

P2179

The asthmatic patient and inhaler treatment devices profile in Turkey:

Aims: To profile various factors that contribute to poor asthma control in Turkey.

Methods: This non-interventional study asthma patients were surveyed at baseline for asthma history, demographics, concomitant medical conditions and smoking habits, with possible impact on asthma and its prognosis, including exacerbation rates. The profile of treatment agents and devices were also evaluated.

Results: A total of 572 patients were enrolled at 31 centres. The majority of asthma patients registered to the study was female (76%) and mean age was 42.7±12.1 years, the mean asthma mean was 7.98±8.28 years. BMI was 28.0 kg/m². During enrollment, asthma symptoms were under control in 22% of patients enrolled, in 38% was not under control and 40% was partially controlled. During enrollment 56% of patients had co-morbid conditions, and 65.5% had rhinosinusitis, 12.8% had GERD, with high percentage of uncontrolled asthma. One in every five patient (18.2%) was current smokers and 49% had uncontrolled asthma during baseline.

Table 1. Asthma treatment at baseline (n=572)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed combinations</td>
<td>455</td>
<td>79.5</td>
</tr>
<tr>
<td>Bronchodilators, as required</td>
<td>116</td>
<td>20.5</td>
</tr>
<tr>
<td>ICS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABA</td>
<td>78</td>
<td>13.6</td>
</tr>
<tr>
<td>ICS-LABA</td>
<td>126</td>
<td>22.7</td>
</tr>
<tr>
<td>Others (i.e., montelukast)</td>
<td>130</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Conclusion: Patient profile of asthmatics receiving inhaler treatment showed that one out of every five patients enrolled were effectively controlled, despite smokers and presence of complicating concomitant medical conditions. Fixed combinations are the main stay of therapy in Turkey, with all types of inhaler devices.

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P2180
Oxygen use and nasal symptoms
Helen Meredith, Alison Cran, Menelaos Pipis, James Goldring. Respiratory Medicine, Royal Free Hospital, London, United Kingdom

It is recognised that oxygen should be prescribed as a drug, but little has been studied about the comfort or side effects of oxygen.

Aim: We wished to see if oxygen had significant nasal side effects for our in-patients.

Method: A snapshot questionnaire was asked to all patients on oxygen on the medical wards of our large teaching hospital during a one week period. We used the Lund score, using predominantly questions in the nasal domain (rating 1-4; normal to severe), to compare their symptoms pre and during admission.

Results:

Demographics
<table>
<thead>
<tr>
<th>Male</th>
<th>Mean age</th>
<th>≥2 days on O2</th>
<th>Humidified O2</th>
<th>Nasal O2</th>
<th>Oral steroids</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>72.7</td>
<td>92%</td>
<td>8%</td>
<td>87.5%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Diagnosis
| Respiratory infection | 11 |
| COPD                 | 8 |
| CCF                  | 2 |
| Other                | 3 |

24 patients were able to answer the questionnaire; the majority were on nasal oxygen and using it for more than 2 days. 42% reported that oxygen wasn’t comfortable, but there was only a significant difference in the symptom of a dry throat (mean difference 0.71, p= 0.009). 4 patients had worsening epistaxis whilst in hospital; 2 rating that as severe.

Discussion: In our patient group using predominantly nasal non-humidified oxygen there was no change in nasal symptoms; it is possible this was ameliorated by the use of steroids in some. However, nearly half found some aspect of oxygen use uncomfortable, and this further supports the need for care regarding the prescription of this drug.