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**Efficacy of Mirabegron in Patients Intolerant or Unresponsive to Antimuscarinics**

**Hypothesis / aims of study**
To evaluate the efficacy of the new beta-3 agonist Mirabegron in treating overactive bladder (OAB) symptoms in patients who are intolerant or unresponsive to antimuscarinics.

**Study design, materials and methods**
Over a twelve month period, all patients with OAB symptoms who were either unresponsive to or unable to tolerate antimuscarinics were commenced on Mirabegron. Their symptom scores were collected prospectively using the ICIQ-OAB questionnaire at baseline and 12 week follow-up.

**Results**
Over the twelve month period, 30 patients were commenced on Mirabegron of which 23 were contactable for the 12 week follow-up. Five patients had stopped taking Mirabegron due to side effects mainly gastro-intestinal upset (4) or severe hypertension (1). Therefore pre- and post-treatment symptom scores were available for 18 patients. Mean score was 42.1/56 at baseline and 30.8/56 at follow up with a mean reduction in symptom score of 11.3. Ten patients were considered responders defined by their global response and willingness to defer further invasive treatment options. Eight patients stopped taking Mirabegron due to lack of response.

**Interpretation of results**
Our results show that Mirabegron can be a useful pharmacological alternative in the treatment of OAB symptoms when antimuscarinics are ineffective or poorly tolerated. However, a significant proportion of patients may have to discontinue treatment due to unbearable side-effects.

**Concluding message**
Based on our observation on this small cohort of patients, the use of Mirabegron can obviate the need for invasive treatment options in approximately 50\% of cases. However, it is unclear if the significant drop-out rate would negate this effect over a long-term follow-up.

**Disclosures**
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