Botox injections can significantly improve quality of life for people with overactive bladders

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Botox is well known for its cosmetic uses, but researchers have now found that it can also significantly improve people's quality of life if they suffer from another problem that increases with age, an overactive bladder (OAB).

A study published in the June issue of BJU International shows that patients who had Botox injections to control bladder problems reported significant improvements in their lives as well as their symptoms for at least 24 weeks.

UK urologists from Guy's Hospital and King's College London carried out a randomised, double-blind placebo trial on 34 patients with an average age of 50. Seven men and nine women received the Botox injections while eight men and ten women received the placebo.

"The Botox or placebo injections were administered using a flexible injection needle inside a cystoscope, a long tube that enables urologists to see inside the bladder" explains consultant urological surgeon Prokar Dasgupta from Guy's Hospital and King's College London School of Medicine.

"This minimally invasive technique involved 20 injections - five in the midline posterior bladder wall, five in the left lateral wall, five in the right lateral wall and five across the dome of the bladder. In all, 200ml of Botox or placebo was administered."

Patients in both groups were assessed when they started the study and at four, 12 and 24 weeks after they received the injection. All the patients who took part in the study had failed to tolerate or respond to anticholinergic drugs, which, along with lifestyle modifications and bladder training, are traditionally used to manage OAB.

Patients who received the Botox injections reported significant improvements when it came to a number of quality of life factors. These were measured using the King's Health Questionnaire, a zero to 100 scale, which was developed in the late 1990s to assess women with urinary incontinence. High scores recorded on the scale indicate a lower quality of life.

All the factors the researchers studied showed a reduction.

The median (mid point) improvements from baseline to 12 weeks were:

- Incontinence impact - from 100 to 65
- Role limitations - from 83 to 50
- Physical limitations - from 75 to 42
- Social limitations - from 72 to 39
- Emotions - from 100 to 65
- Severity measures - from 67 to 34
- Sleep/energy - from 83 to 58
- Personal relationships - from 67 to 50.

Symptom severity in the Botox group fell from 17 to 12 when it was measured on a zero to 30 scale.

The only improvement in the placebo group was role limitations, from a median level of 83 to 66. The rest of the categories showed no improvement.

At 12 weeks the study was unblinded so that both the clinicians and patients knew who was receiving

the Botox injections. Further improvements were noted in all categories during this extended period, including sleep and energy and personal relationships, which had not performed as well as the other categories in the first 12 weeks.

Previous research has shown that as many as one in six people over the age of 40 suffer from an overactive bladder and that the condition can have a very adverse affect on people's quality of life.

"Our study showed a significant relationship between the overall improvement in OAB symptoms and improved quality of life scores" says Mr Dasgupta.

"For example, at four weeks urgency and urge urinary incontinence were statistically correlated with improvements in quality of life and the same was true at 12 weeks for frequency and urgency.

"The overall benefits lasted at least 24 weeks after the injections were administered, with patients reporting both a reduction in bothersome bladder symptoms and an improved quality of life."

Source: Wiley - Blackwell