Neurourology and Urodynamics 13:85–86 (1994)

LETTER TO THE EDITOR

Epistaxis as a Side Effect of Oxybutynin in Children: Report of Two Cases

To the editor:

Many side effects of oxybutynin chloride (OC) have been reported in adults [Kirkali and Whitaker, 1987; Primus and Pummer, 1990; Moore et al., 1990] and children [Massad et al., 1992; Vallejo-Herrador et al., 1988]. We report a rare side effect observed in two patients in a short period of time.

PATIENT 1

A 10-year-old girl with recurrent pyelonephritis and no vesicoureteral reflux was found to have bladder instability on urodynamics and started on OC (10 mg/day). She abandoned medication due to abdominal pain, with recurrence of instability 18 months later. OC (15 mg/day) was prescribed and 2 months later she complained of facial flushing and pruritus. The dose was reduced to 10 mg/day. Ten months later she suffered various episodes of epistaxis and was seen by an otolaryngologist, who ruled out major problems. Episodes of epistaxis subsided after 1 week of dose reduction to 5 mg/day. She is now taking 20 mg/day due to worsening of her instability, without side effects.

PATIENT 2

A 4-year-old girl with a history of recurrent urinary tract infections since the age of 2 years showed sustained instability with low compliance and no reflux on voiding cystourethrogram. She started chemoprophylaxis and 10 mg/day OC and presented self-limited facial flushing. Ten months later she presented various episodes of epistaxis, which disappeared when the dose was reduced to 5 mg/day. One year later she is taking the same dose with occasional periods of epistaxis.

DISCUSSION

Clinical efficacy of OC for detrusor instability has been documented in adults [Tapp et al., 1990] and children [Homsy et al., 1985; Vallejo-Herrador et al., 1988; Scholtmeijer and Van-Mastrigt, 1991]. Side effects related to its anticholinergic properties have been reported with varying frequency (16–80%), causing withdrawal of up to 16% of patients. Frequent side effects are dry mouth, constipation, urinary retention, nausea, headache, and flushes [Kirkali and Whitaker, 1987; Primus and Pummer, 1990]. Recent reports show that intravesical administration has similar efficacy, better absorption, and less side effects. Since side effects were observed in

intravesical administration in two patients with gastric or colonic bladder augmentation, a hepatic metabolite might be responsible for them [Massad et al., 1992].

We have found only one previous report in the literature of epistaxis as an adverse effect of OC [Kirkali and Whitaker, 1987], and no case could be recovered either from IOWA database or from our WHO regional center for side effects of drugs. Epistaxis in children can be traumatic due to nose-picking, but our two cases had a clear relation with OC administration, and neither had a previous history of epistaxis. Dryness of the nasal mucosa is probably the major factor, but this was found in only one of our patients. Since facial flushing is another frequent side effect, vessel dilation may also play a role. If epistaxis appears in a child taking OC, we propose that the dose be reduced to 5 mg/day and then increased progressively again and a rhinological examination performed. If this side effect appears to be frequent, a higher number of reports will clarify its management.

ACKNOWLEDGMENTS

Dr. A. Figueras (Department of Clinical Pharmacology, C.S. Vall d'Hebron/ Regional WHO Drug Safety Surveillance Center, Spain) provided information on IOWA and WHO databases.

J.E. Batista, J. Caffaratti, and J.M. Garat
Department of Urology
Fundación Puigvert
Cartegena 340
08025 Barcelona, Spain

REFERENCES

Homsy YL, Nsouli I, Hamburger B, Laberge I, Schick E (1985): Effects of oxybutynin on vesicoureteral reflux in children. J Urol 134:1168–1171.

Kirkali Z, Whitaker RH (1987): The use of oxybutynin in urological practice. Int Urol Nephrol 19:385–391.

Massad CA, Kogan BA, Trigo-Rocha RE (1992): The pharmacokinetics of intravesical and oral oxybutynin chloride. J Urol 148:595–597.

Moore KH, Hay DM, Imrie AE, Watson A, Goldstein M (1990): Oxybutynin hydrochloride with idiopathic detrusor instability. Br J Urol 66:479–485.

Primus G, Pummer K (1990): Oxybutynin hydrochloride in the management of detrusor instability. Int Urol Nephrol 22:243–248.

Scholtmeijer RJ, Van-Mastrigt R (1991): The effect of oxyphenonium bromide and oxybutynin hydrochloride on detrusor contractility and reflux in children with vesicourethral reflux and detrusor instability. J Urol 146:660–662.

Tapp AJ, Cardozo LD, Versi E, Cooper D (1990): The treatment of detrusor instability in post-menopausal women with oxybutynin chloride: A double blind placebo controlled study. Br J Obstet Gynaecol 97:521–526.

Vellejo-Herrador J, Rodriguez-Luna JM, Fernández-Fernández A, et al. (1988): Inestabilidad del detrusor. Tratamiento con cloruro de oxibutinina en niños. Actas Urol Esp 14:1–5.