

Angioedema induced by angiotensin II blocker telmisartan

A. Borazan, H. Üstün*, A. Yılmaz

Key words: allergy; angioedema; angiotensin-II inhibitor; telmisartan.

Telmisartan (Pritor, Glaxo-Smith-Kline, Boehringer Ingelheim Pharma KG, Germany) is an orally effective blocker of the angiotensin II (AII) receptor. Angioedema is a rare side effect of AII-receptor blockers (1, 2). We describe a case of angioedema caused by telmisartan, which rarely causes allergic reactions.

A 66-year-old woman was admitted to the outpatient clinic with occipital headache. The patient had 1 year hypertension history and had not used any antihypertensive medication. The blood pressure was 160/100 mmHg. All physical examination findings of the patient was normal. Telmisartan was started at a dose of 80 mg/day per oral. The patient was admitted to hospital with dyspnea after 12 h of telmisartan medication. Physical examination of the patient revealed 140/100 mmHg of blood pressure, edema of mucosal surfaces and uvula and edema-like anasarca pattern especially in right-sided hemilateral, wheezing and ronchus. Methyl-prednisolone and antihistaminic were administered intravenously to the patient. Symptomatic relief was achieved after 2 h of medication. Oral methyl-prednisolone and antihistaminic were continued for 5 days. A calcium channel blocker, amlodipin, 10 mg/day was started as antihypertensive agent. The patient was reported to Glaxo-Smith-Kline Centre because of angioedema development after telmisartan therapy.

Telmisartan is an AII-receptor blocker and effective in patients with mild-to-moderate hypertension with daily doses of 20–160 mg (1). The frequency of cough in patients taking losartan or telmisartan was low (3, 4). Acetylcholinesterase (ACE) inhibitor-induced cough

is thought to result from the inhibition of bradykinin degradation by ACE inhibitors. If bradykinin causes ACE inhibitor-induced cough or anaphylaxis, AII-receptor blockers should be free of these side effects (1, 5).

Recent case reports, however document angioedema following therapy with A II-receptor blockers; 32% of the reported patients experienced a prior episode of angioedema attributed to ACE inhibitor therapy (6). In our case, the patient had no ACE inhibitor medication previously.

Sharma and coworkers (7) reported the case of a hemodialysis patient who previously had angioedema after therapy with ACE inhibitors and again had angioedema while taking losartan. Acker et al. (8) reported a case of losartan-induced angioedema in a patient with renal insufficiency and allergic to radiographic contrast material. The patient previously used ACE inhibitor without any side effect or angioedema history.

Alternative therapy is necessary for patients who experience angioedema which is a potential life-threatening adverse effect. Our patient's blood pressure was controlled with a calcium channel blocker, amlodipin.

We recommend that telmisartan and other AII-receptor blockers should be used cautiously in patients with a history of sensitivity to ACE inhibitors or other agents and the patients should be informed about the allergic reactions.

*Harpsundsvägen 9,
2tr 12458 Bandhagen/Stockholm
Sweden
Tel.: +46-737705975
E-mail: ustunhtr@hotmail.com

Accepted for publication 16 January 2003
Allergy 2003; 58:454
Copyright © Blackwell Munksgaard 2003
ISSN 0105-4538

References

- BURNIER M, BRUNNER HR. Angiotensin II receptor antagonists. *Lancet* 2000;**355**:637–645.
- MAZZOLAI L, BURNIER M. Comparative safety and tolerability of angiotensin II receptor antagonists. *Drug Safety* 1999;**37**:101–107.

- PELLACANI A, BRUNNER HR, NUSSBERGER J. Plasma kinins increase after angiotensin-converting enzyme inhibition in human subjects. *Clin Sci (Lond)* 1994;**87**:567–574.
- LACOURCIERE Y. The incidence of cough: a comparison of lisinopril, placebo and telmisartan, a novel angiotensin II antagonist. Telmisartan Cough Study Group. *Int J Clin Pract* 1999;**53**:99–103.
- NUSSBERGER J, CUGNO M, AMSTUTZ C, CICARDI M, PELLACANI A, AGOSTONI A. Plasma bradykinin in angio-oedema. *Lancet* 1998;**351**:1693–1697.
- WARNER KK, VISCONTI JA, TSCHAMPPEL MM. ANGIOTENSIN II receptor blockers in patients with ACE inhibitor-induced angioedema. *Ann Pharmacother* 2000;**34**:526–528.
- SHARMA PK, YIUM JJ. Angioedema associated with angiotensin II receptor antagonist losartan. *S Med J* 1997;**90**:552–553.
- ACKER CG, GREENBERG A. Angioedema induced by the angiotensin II blocker losartan. *N Engl J Med* 1995;**333**:1572.

Antiphospholipid syndrome during allergic bronchopulmonary aspergillosis

T. Niitsuma*, M. Nukaga, A. Izawa, M. Tsuyuguchi, N. Tsuboi, T. Hayashi

Key words: allergic bronchopulmonary aspergillosis; antiphospholipid syndrome; eosinophilia; thromboembolism.

The antiphospholipid-antibody syndrome (APS) is an autoimmune disease associated with auto-antibodies to phospholipids, arterial and venous thrombosis, and thrombocytopenia. We report a case of APS that developed in a patient with allergic bronchopulmonary aspergillosis (ABPA).

A 60-year-old man presented with pain of the right lower extremity and coldness of the left hand. Coughing and expecto-

Eosinophilia may act as a pro-coagulant factor in addition to lupus anticoagulant, leading to thrombosis.