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Učinkovitost i sigurnost valsartana u liječenju pacijenata s blagom do umjerenom arterijskom hipertenzijom

The efficacy and safety of valsartan in the treatment of patients with mild to moderate hypertension

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SAŽETAK: *Arterijska hipertenzija (AH) predstavlja jedan od glavnih čimbenika rizika za nastanak kardiovaskularnih bolesti. Stoga je veoma važno koristiti sigurne i učinkovite lijekove za kontrolu visokih vrijednosti arterijskog tlaka (AT).*

Cilj ove studije je usporedba učinkovitosti i sigurnosti valsartana u liječenju pacijenata s blagim do umjerenim stupnjem AH. U statističku analizu je uključeno ukupno 1119 pacijenata oba spola. Svaki pacijent je pregledan tri puta.Vrijednosti sistoličkog i dijastoličkog AT na kraju studije su značajno snižene. U prosjeku je sistolički AT snižen za 19 mmHg (12,2%), a dijastolički za 9,3 mmHg (10,2%). Ukupna klinička učinkovitost Valsacor® bila je ocijenjena kao odlična ili vrlo dobra. Ciljna vrijednost AT od 140/90 mmHg ili niže postignuta je kod 84% pacijenata (934 pacijenta). Zajedno s ukupnom učestalosti nuspojava od 3,8% tijekom cijelog trajanja studije, valsartan se dokazao kao vrlo siguran i učinkovit antihipertenziv.

KLJUČNE RIJEČI: *valsartan, učinkovitost, sigurnost, arterijska hipertenzija*

ABSTRACT: *Hypertension is one of the major risk factors for cardiovascular diseases. Therefore it is very important to use safe and effective medicines when managing high blood pressure.*

The present study was performed to compare the efficacy and safety of valsartan in the treatment of patients with mild to moderate hypertension. A total of 1119 patients of both genders were included in statistical analysis. Each patient was examined three times. Both systolic and diastolic blood pressure (BP) were reduced significantly at the end of the study. On average systolic BP was reduced by 19 mmHg (12.2%) and diastolic BP was reduced by 9.3 mmHg (10.2%), respectively. The total clinical efficacy of Valsacor® was evaluated as excellent or very good. The BP was reduced to the goal of 140/90 mmHg or less in 84% of the patients (934 patients). Together with the total incidence of 3.8% for adverse reactions throughout the course of the study, valsartan was proven to be a very safe and effective antihypertensive.

KEYWORDS: *valsartan, efficacy, safety, hypertension*

Uvod

Arterijska hipertenzija (AH) predstavlja glavni čimbenik rizika za cijeli niz kardiovaskularnih i pridruženih

Introduction

Hypertension is a major risk factor for an array of cardiovascular and related diseases as well as for diseases

bolesti kao i za bolesti koje dovode do značajnog povišenja kardiovaskularnog rizika. Liječenje i kontrola povišenih vrijednosti arterijskog tlaka (AT) i dalje su daleko od optimalne. Uzrok slabog pridržavanje preporučene terapije, a time i neučinkovitosti, predstavljaju složeni i nepovoljni režimi primjene te lijekovi koji utječu na kvalitetu života[1,2].

Valsartan je antagonist angiotenzin II receptora tipa 1 (ARB), koji predstavljaju modernu i jedinstvenu klasu antihipertenziva koji selektivno blokiraju AT_1 receptore u vaskulaturi glatkog mišićja sprječavajući vezivanje angiotenzina II, inhibirajući renin angiotenzin aldosteron sustav i snižavajući vrijednosti AT[3].

Pacijenti i metode

Studija je ispitivala učinkovitost i sigurnosni profil valsartana, jednog od najpropisivanijih predstavnika ARB u svijetu, kod pacijenata s blagim do umjerenim stupnjem AH. U statističku analizu je uključeno ukupno 1119 pacijenata (53% muškaraca, 44% žena), prosječne dobi 63,5 ± 11,7 godina. 174 pacijenta (15,5%) je pristupilo studiji bez prethodnog liječenja, dok su 944 pacijenta (84,4%) bili već i prije liječeni. Najčešćih pet lijekova korištenih kod prethodno liječenih pacijenata su bili enalapril (20,4%), ramipril (13,5%), valsartan (11,3%), indapamid (7,9%) i perindopril (7,5%). Pošto je 24-satni antihipertenzivni učinak valsartana već ranije dokazan[4], pacijenti su liječeni s 40, 80, 160 ili 320 mg valsartana (Valsacor®, Krka) jednom dnevno te su pregledani tri puta u tri mjeseca. Kod prve posjete i u dvije kontrolne posjete je izmjeren AT, prijavljene su nuspojave, te je naposljetku procijenjena učinkovitost liječenja.

Rezultati i diskusija

Početni AT je izmjeren kod prve posjete i prosječno je iznosio 155,4 mmHg za sistolički arterijski tlak (SAT) i 90,9 mmHg za dijastolički arterijski tlak (DAT). Nakon jednog mjeseca SAT je snižen na 142,6 mmHg, a DAT na 84,9 mmHg. Sniženje je također zabilježeno i kod trećeg posjeta, kad je prosječni SAT bio 136,4 mmHg, a DAT 81,6 mmHg. Ukupno sniženje AT je u prosjeku iznosilo 19 mmHg (relativno sniženje za 12,2%) za sistolički i 9,3 mmHg (relativno sniženje od 10,2%) za dijastolički, što je u skladu s već ranije objavljenim rezultatima[5] (**slika 1**).

Tijekom liječenja su prijavljene ukupno 52 nuspojave kod 42 pacijenta (3,8%) od njih ukupno 1.119te su bile slične onima o kojima su izvjestili Biswas i sur[6]. Tri najčešće nuspojave su bile glavobolja (15 pacijenata, 1,3%), vrtoglavica (8 pacijenata, 0,7%) i umor (4 pacijenta, 0,4%). Kašalj je zabilježen kod 3 pacijenta (0,3%). Ukupno je 13 pacijenata (1,2%) prekinulo liječenje zbog nuspojava.

Ukupna klinička učinkovitost valsartana je procijenjena prema sniženju vrijednosti AT i nuspojava. Na kraju studije, 64% pacijenata je imalo vrijednost AT 140/90 mmHg ili niže te nisu imali nuspojave (ocijenjeni odlično); 20% pacijenata je imalo AT 140/90 mmHg ili niže i imalo je blage nuspojave (ocjenjeni s vrlo dobrim); 8% pacijenata je imalo SAT snižen za bar 10 mmHg i DAT smanjen za bar 5 mmHg te nisu imali nuspojave (ocijenjeni su s dobrim). Ostali su postigli ciljane vrijednosti AT uz umjerene

leading to a marked increase in cardiovascular risk. However, the situation regarding treatment and control of high blood pressure (BP) is still far from optimal. Complex and inconvenient medical regimens and medicines that interfere with the quality of life promote poor compliance and are therefore ineffective[1,2].

Valsartan is a member of angiotensin II type 1 receptor antagonists (ARB), which present a modern and unique class of antihypertensive agents that selectively block AT_1 receptors in vascular smooth muscle, thereby preventing binding of angiotensin II, inhibiting the renin angiotensin aldosterone system and lowering BP[3].

Patients and methods

The present study investigated efficacy and safety profile of valsartan, one of the most prescribed ARB worldwide, in patients with mild to moderate hypertension. A total of 1119 patients were included in statistical analysis (53% males, 44% females), the average age was 63.5 ± 11.7 years. 174 patients (15.5%) were naive entering the study, while 944 patients (84.4%) were already treated before. The five most common therapies used in these previously treated patients were enalapril (20.4%), ramipril (13.5%), valsartan (11.3%), indapamide (7.9%) and perindopril (7.5%). Since 24-hour antihypertensive effect of valsartan was previously proven[4], patients received 40, 80, 160 or 320 mg of valsartan (Valsacor®, Krka) once a day and were examined three times in three months. At the initial visit and at the two control visits, BP was measured, adverse events were reported, and finally the effectiveness of the treatment was evaluated.

Results and discussion

The baseline BP was measured at the first visit and was on average 155.4 mmHg for systolic blood pressure (SBP) and 90.9 mmHg for diastolic blood pressure (DBP). After one month SBP was already 142.6 mmHg and DBP was lowered to 84.9 mmHg. Reduction was seen also at third visit, when average SBP was 136.4 mmHg and DBP 81.6 mmHg. All in all, the total reduction in BP was on average 19 mm Hg (a relative reduction of 12.2%) for systolic and 9.3 mmHg (a relative reduction of 10.2%) for diastolic, which is in agreement with previously published results[5] (**Figure 1**).

During the treatment a total number of 52 adverse reactions were reported in 42 patients (3.8%) of all 1119 statistically analyzed patients and were similar to those reported by Biswas et al[6]. The three most common adverse events were headache (15 patients, 1.3%), vertigo (8 patients, 0.7%) and fatigue (4 patients, 0.4%). Cough was reported by 3 patients (0.3%). 13 patients (1.2%) withdrew from the treatment due to adverse reactions.

Additionally, the total clinical efficacy of valsartan was evaluated according to the reduction of BP and adverse reactions. At the end of the study, 64% of patients had a BP of 140/90 mmHg or less and were without adverse reactions (assessed as excellent); 20% of patients had a BP of 140/90 mmHg or less and had mild adverse reactions (assessed as very good); 8% of patients had the SBP reduced by at least 10 mm Hg, and the DBP by at least 5 mm Hg

do ozbiljne nuspojave (ocijenjeni su zadovoljavajuće ili nezadovoljavajuće) (**slika 2**).

Zaključci

Podaci iz ove studije ukazuju da su i sistolički i dijastolički AT značajno sniženi nakon 3 mjeseca liječenja valsartanom. Valsacor® je dokazan kao učinkovit i siguran antihipertenzivni lijek za liječenje blage do umjerene AH. Ukupna klinička učinkovitost je ocijenjena kao odlična ili vrlo dobra, što se tumači kao sniženje AT na ciljanu vrijednost u većine pacijenata.

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and were without adverse reactions (assessed as good). Others reached BP goal and had moderate or serious adverse reactions (assessed as satisfactory or unsatisfactory) (**Figure 2**).

Conclusions

Data from this study indicate that both systolic and diastolic BP were reduced significantly with valsartan therapy after 3 months. Valsacor® was proven to be an effective and safe antihypertensive medicine for the treatment of mild to moderate essential hypertension. The total clinical efficacy was evaluated as excellent or very good, which is translated as a reduction of BP to the BP goal in the majority of patients.

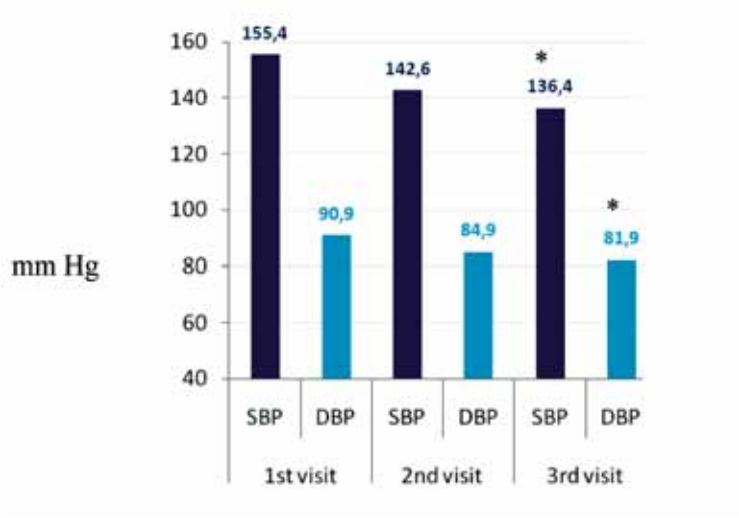

Figure 1. *Average systolic and diastolic blood pressure at every visit in mm Hg (* p < 0.0001 vs first visit).*

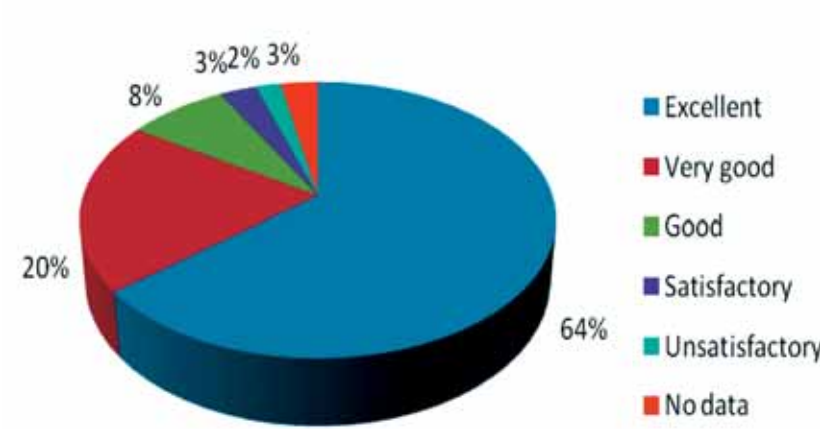

Figure 2. *Evaluation of the clinical efficacy.*

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