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Nocturia and Sleep Disturbance Depending on the Nifedipine Use

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Calcium channel blockers are frequently used antihypertensive drugs. Adverse effects of each calcium channel blocker may be more dominant than the other. Nifedipine is a calcium channel blocker used for different indications. Nocturia is a rarely seen adverse effect of the calcium channel blockers. In this study we presented an old patient with hypertensive taking nifedipin, suffered from nocturia and insomnia.

Keywords: Nifedipine – Nocturia - Sleep Disturbance

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НИФЕДИПИНДІ ҚОЛДАНУ БАРЫСЫНДА БОЛАТЫН НИКТУРИЯ МЕН ҰЙҚЫСЫЗДЫҚ

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Артериалды гипертонияның емінде кальций каналдары блокаторлары жиі қолданылады. Әрбір кальций антагонистінің кері әсері болады. соның ішінде никтурия осы препараттардың ең сирек кездесетін жағымсыз әсеріне жатады. Редакторға хатта біз нифедипин қабылдап жүрген егде жастағы науқастың ұйқысыздық пен никтурияға ұшырағаны жайлы баян етеміз.

Маңызды сөздер: Нифедипин - никтурия - ұйқысыздық

НИКТУРИЯ И НАРУШЕНИЕ СНА В ЗАВИСИМОСТИ ОТ ПРИЕМА НИФЕДИПИНА

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Препараты блокаторов кальциевых каналов часто используются при лечении артериальной гипертонии. Каждый антагонист кальция имеет побочные эффекты. Никтурия является редким неблагоприятным эффектом блокаторов кальциевых каналов. В письме редактору журнала мы представили случай пожилого пациента, принимавшего нифедипин, который страдал от бессонницы и никтурии.

Ключевые слова: Нифедипин - никтурия - нарушение сна

To the Editor:

Calcium channel blockers are frequently used antihypertensive drugs. Adverse effects of each calcium channel blocker may be more dominant than the other. Nifedipine is a calcium channel blocker used for different indications. Nocturia is a rarely seen adverse effect of the calcium channel blockers [1]. In this study we presented an old patient with hypertensive taking nifedipin, suffered from nocturia and insomnia.

Sixty-four year old, male, hypertensive patient taking nifedipin 30 mg/d, having nocturia (6-7 times a night) was admitted to our study. He was somnolent fatigue, restless, irritable and having dry mouth because of nocturia and insomnia of night before for nearly a year. A month ago the patient were examined for the urologic disorder and the data were; prostate 38 gr. weight by ultrasonographic evaluation, PSA level: 1.14 ng/ml and fesoterodin 4 mg/d was given considering the overactive bladder. The therapy was not effective. Laboratory data were; Insulin level: 11 micIU/ml (normal range: 3-17 micIU), Glycosylated hemoglobin (HbA1c): 5.4%, Fasting plasma glucose: 91 mg/dl, oral glucose tolerance test, 2-hour glucose level: 154 mg/dl, blood urea nitrogen: 19 mg/dl and serum creatinin: 1.1 mg/dl. It was thought that nocturia

was an adverse effect of nifedipin and we stopped using nifedipin and began telmisartan. The complaints of nocturia and daylight somnolence were disappeared completely. The patient began nifedipin after a monthly telmisartan therapy and nocturia and daylight somnolence recurred in a few days. So nifedipin was stopped and telmisartan was prescribed and the symptoms were completely resolved.

There are many causes of nocturia. In our case we want draw your attention to use of nifedipin, a rare cause of nocturia which makes somnolence, restlessness and irritation. A careful clinical evaluation of complaints and laboratory data showed us that the cause of noctria was the use of nifedipine. Discontinuing nifedipin resolved the clinical problems which confirmed our diagnosis. In the study of Leonetti et al [2], they showed us after 6 hours of taking nifedipin, there was a marked renal excretion of sodium and water which was the pathophysiologic explanation of nocturia. In another study [3], sustained release forms of nifedipin also create nocturia and the patient stopped using nifedipin because of insomnia. We appreciated the importance of taking medical history to make an exact diagnose which was the principal of medicine in this case.

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