recommended lipid levels, physicians often use it either alone or in conjunction with statins. While there are a considerable number of reports of rhabdomyolysis when statins or statin–fibrate combinations are used for the treatment of hypertriglyceridemia, there are few such reports relating to fibrate monotherapy.^[1-3] Here, we present a case of life-threatening rhabdomyolysis with fenofibrate monotherapy.

A 60-year-old female presented at our out-patient clinic with complaints of a diffuse myalgia and with a decreased urine output for 4 days. Her medical history included diabetes mellitus type 2 and she had suffered from hypertension for 3 years. But, there was no known renal disease. Her medications included insulin injections totaling 14 units and diltiazem HCl 90 mg b.d., which had ceased the previous week. Fenofibrate was prescribed in a 200 mg daily dose to treat the hyperlipidemia. Given her complaints and the decreased urine output, we checked the creatinine and creatinine kinase (CK) levels and found them to be 4.2 mg /dl and 11867 units/l, respectively. She was immediately admitted to the in-patient clinic. Her admission labs were remarkable for the elevated levels of transaminases found. The probability score for an adverse drug reaction (ADR) based on Naranjo's algorithm was 9, which indicated that an ADR was highly probable.^[4] Given that the creatinin and CK levels were elevated, fenofibrate was discontinued. On admission the patient was oliguric. Following both oral and intravenous hydration and bicarbonate therapy, her urine output reached 3000-4000 ml daily. After 4 days of treatment, her complaints had resolved and her labs were as indicated: CK 1655 units/l and creatinine 3.6 mg/dl. On the 10th day of therapy, the serum CK was measured at 500 units/l.

FENOFIBRATE MONOTHERAPY-INDUCED RHABDOMYOLYSIS IN A PATIENT WITH TYPE-2 DIABETES

Sir,

Fenofibrate, a fibric acid derivative, has been used for nearly 10 years to treat hypertrigilyceridemia and diabetic dyslipidemia. In order to attain the creatinine 1.5 mg/dl and potassium 4.2 mEq/l. Furthermore, the values of hepatic transaminases had returned to within the normal range.

Fibrates are the most effective drug for reducing triglyceride levels and they also increase the high density lipoprotein levels. Fenofibrate is more effective than gemfibrozil at lowering serum the low density lipoprotein, cholesterol and triglyceride concentrations. The side-effects of fibrate treatment include gastrointestinal complaints, with the most significant adverse effect being gall stones. Rhabdomyolysis is a comparatively rare and adverse effect of these agents. Fibrates potentiate muscle toxicity when used with statins. Fenofibrates are proven to be the safest fibrate to use with statins.^[1-3,5]

Fenofibrate monotherapy-induced rhabdomyolysis is a rare and newly encountered clinical condition. Typically, patients with rhabdomyolysis following fenofibrate monotheraphy have a medical history of chronic renal failure, diabetes mellitus and hypothyroidism. There may also be some conditions that increase the risk factors for rhabdomyolysis, such as dehydration and old age. Before and during fenofibrate therapy, the physician should be aware of the side and adverse effects of the drug and should interrogate patients for known and probable pre-existing conditions for rhabdomyolysis.^[3,5] We suggest that patients in this group are closely monitored in the weeks following the commencement of treatment.

RAMAZAN ÇETINKAYA, ABDULLAH UYANIK, RAHŞAN YILDIRIM¹, YUSUF BILEN¹, MUSTAFA KELEŞ

Departments of Nephrology and ¹Internal Medicine, Atatürk University Medical Faculty, Erzurum, Turkey.

> Correspondence: Dr. Ramazan Cetinkaya Ataturk Universitesi Postanesi,

PK: 7, 25171-Erzurum, Turkey. E-mail: ramazancetinkaya@yahoo.com DOI: 10.4103/0019-5359.48458

REFERENCES

- Barker BJ, Goodenough RR, Falko JM. Fenofibrate monotherapy induced rhabdomyolysis. Diabetes Care 2003;26:2482-3.
- Jen SL, Chen JW, Lee WL, Wang SP. Efficacy and safety of fenofibrate or gemfibrozil on serum lipid profiles in Chinese patients with type IIb hyperlipidemia: A single-blind, randomized, and cross-over study. Zhonghua Yi Xue Za Zhi (Taipei) 1997;59:217-24.
- Unal A, Torun E, Sipahioglu MH, Tokgoz B, Kaya MG, Oymak O, *et al.* Fenofibrate-induced acute renal failure due to massive rhabdomyolysis after coadministration of statin in two patients. Intern Med 2008;47:1017-9.
- Naranjo CA, Busto U, Sellers EM, Sandor P, Ruiz I, Roberts EA, *et al.* A method for estimating the probability of adverse drug reactions. Clin Pharmacol Ther 1981;30:239-45.
- Tahmaz M, Kumbasar B, Ergen K, Ure U, Karatemiz G, Kazancioglu R. Acute renal failure secondary to fenofibrate monotherapy-induced rhabdomyolysis. Ren Fail 2007;29:927-30.
- Bruno-Joyce J, Dugas JM, MacCausland OE. Cerivastatin and gemfibrozil-associated rhabdomyolysis. Ann Pharmacother 2001;35:1016-9.