CASE REPORT

RITUAL HERB PILL INDUCED MYOPATHY IN A HYPERCHOLESTEROLEMIC PATIENT TREATED WITH SIMVASTATIN

Viroj Wiwanitkit, M.D.

Department of Laboratory Medicine, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand.

SUMMARY

A case of female patient with myopathy associated with simvastatin administration is reported. She revealed no history of drug use but only ritual herb ball pill. The patient also did not do any severe exercise. Elevation of serum CK exceeding three times the upper limit, was observed in this patient and returned to normal limits within 2 weeks after simvastatin administration was canceled. This is the first probable case report of myopathy side effect from concomitant use of ritual herb pill to simvastatin administration in Thai patient.

Key words: simvastatin, myopathy

72 Viroj Wiwanitkit

Simvastatin is a hypocholesterolemic agent which acts as a potent inhibitor of hydroxymethylglutaryl coenzyme A (HMG - CoA) reductase. It is a widely used drug in the present day. The common adverse effects of using this drug are headache and gastrointestinal irritation. Myopathy is an extremely rare complication of simvastatin (0.08 %)¹. In this article, a case report of ritual ball pill induced myopathy associated with simvastatin administration is presented.

CASE REPORT

A 42-year-old woman presented to the physician to follow up her hyper-cholesterolemia complained about diffuse myalgia and fatique. This patient had been diagnosed to have hypercholesterolemia and was prescribed simvastatin 10 milligram/day for 3 years. At first diagnosis the patient showed no sign of another illness and abnormal laboratory results (complete blood count, fasting blood glucose, liver function test, blood urea nitrogen, serum creatinine, serum electrolyte and serum creatine kinase).

In this visit, she revealed no history of drug and narcotic use. The patient also did not do any severe exercise. The patient had no clinical evidence of myopathic illness before. From physical examination, no abnormality was found. The level of serum CK (CK-NAC method, Boehringer Manheim, normal 0 - 190 U/l) at this follow-up was 1,961 U/l and after retest the serum CK level was 2.078 U/l. The composition of CK analysis revealed CK-MB to be equal to 38 U/l. The chest X-ray and EKG were within normal limits. Urinalysis result was normal. Erythrocyte sedimentation rate was 130 mm/hr. Tests for antinuclear antibody and rheumatoid factor were negative. Complement levels and results of thyroid function tests were all within normal limits.

From further history taking, this patient revealed the herbal medicine usage. She revealed that she had been taking the ritual herb ball pill for three months to relieve her cough symptom, concomitant to simvastatin administration. The diagnosis of myopathy was made, and simvastatin administration was canceled. The patient was followed for the symptoms and serum CK level. The patient returned to normal within 2 weeks, the course of CK level during follow up was presented as 640 U/l at 1 week and 54 U/l at 2 week after canceling of simvastatin administration.

DISCUSSION

Simvatatin is an effective hypolipidemic agent and usually prescribed in the present day. Its major effect is reduction of total cholesterol and LDL levels2. The long term clinical study revealed its safety, effectiveness and that it was well tolerated, Adverse effect as elevation of serum CK within three times of normal limit can be observed in less than 1 % of the patients with simvastatin administration². Severe complication as myopathy with elevation of serum CK exceeding three times the upper limit, was observed in 0.08 % of the total cases ². Many reports mentioned this side effect of simvastatin in the context of other illnesses and drug administration such as warfarin and gemfibrozil³⁻⁶. Immunosuppressive agents is another group of medicine mentioned to induce invopality associated with simvastatin administration4-6

Although the risk of simvastatin hypersensitivity syndrome presented as polymyalgia rheumatica is known to be increased by concomitant steroid therapy but the actual mechanism of pathological muscle effect is still unknown. In this case the patient had the history of concomitant usage of ritual herb pill to simvastatin and believed to be the cause of the myopathy. The ritual herb pill is one of the oriental traditional cultures. People believe that the ritual ball pill is such a magic drug that can cure many diseases. Possibly immunosuppressive steroid ingredient in the ritual pill is commonly not known by the patient and can often lead the adverse steroid induced side effect or adverse effect due to drug interaction. In case of concomitant usage of ritual pill with simvastatin, the myopathy associated with immunosuppressive steroid ingredient can be expected. However, in this case no ritual ball pill was collected from the patient, therefore, no certain composition of the pill could be known. The diagnosis was based on follow-up after cessation of the steroid pill.

Although simvastatin was introduced into Thailand several years ago, there has been no report of myopathy as side effect in Thai patients from literature reviewed. This article reports the probable case of myopathy in a middle-aged Thai hypercholesterolemic patient without other illnesses or concomitant drug usage except for ritual herb pill. The patient presented with myalgia symptom and

diagnosed by laboratory profile and treatment follow-up. Recommendation for awareness and monitoring of this side effect in drug administration is set. Patient education of the possible adverse effect due to concomitant drug usage should also be performed.

REFERENCES

- Boccuzzi SJ, Bocanegra TS, Walker JE, Shapiro DR, Keegan ME. Long-term safety and efficacy profile of simvastatin. Am J Cardiol 1991; 68: 1127-31.
- Walker JF. Simvastatin : the clinical profile. Am J Med 1989; 87: 44-6.
- Mogyorosi A, Bradley B, Showalter A, Schubert ML. Rhabdomyolysis and acute renal failure due to the combination therapy with simvastatin and warfarin. J Intern Med 1999; 246: 599-602.
- Tal A, Rajeshawari M, Isley W. Rhabdomyolysis associated with simvastatin-gemfibrozil therapy. South Med J 1997; 90: 546-7.
- Deslypere JP, Vermeulen A. Rhabdomyolysis with simvastatin. Ann Intern Med 1991; 114: 342.
- Berland Y, Vacher Coponat H, Cooper C, Durand C, et al. Rhabdomyolysis with simvastatin use. Nephron 1991; 57: 365-6.