Fibrate therapy predispose to influenza vaccine-induced rhabdomyolysis

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Introduction:
Fibrates are widely used to manage dyslipidemia but these drugs can induce rhabdomyolysis with acute renal failure. Rhabdomyolysis is a skeletal muscle cell damage condition associated with the release of toxic components of the cells and to the end, renal failure. The onset of rhabdomyolysis can extend to 6 months with fibrate therapy. Some researchers purpose that the influenza vaccine can induce the rhabdomyolysis in patients who receive myotoxic drugs. Here we present a case who develops rhabdomyolysis and acute renal failure after influenza vaccine during fibrate therapy.

Case:
Case: A 65 years old male patient admitted to the hospital with weakness and pain of the extremity muscles. He had tenderness widespread of the body and feel difficulty to move. He had coronary heart disease and hyperlipidemia. He was taking 267mg of fenofibrate daily for 5 months and had influenza vaccine administration a week before admission to the hospital. Laboratory examination showed markedly elevated serum creatine kinase levels (27730 U/L) and creatinine was 2.16 mg/dl (creatinine level was normal range before the vaccine administration). After discontinuing the fibrate therapy and adequate fluid resuscitation renal function recovered and the symptoms of myopathy resolved.

Conclusion:
The risk of rhabdomyolysis increases with polypharmacy with myotoxic agents like lipid lowering medications. As a conclusion; influenza vaccine administration must be kept in mind as another myotoxic situation especially in patients with taking lipid lowering drugs like fenofibrate.