Statin-Associated Necrotizing Myopathy: A Feared Complication
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INTRODUCTION
- Statins are a group of frequently-prescribed drugs with proven cardiovascular risk-benefit.
  - The common adverse effects are weakness and myalgias. However, prescribers should have caution and awareness of statin-induced necrotizing myopathy.
  - We present a case of an elderly male with chronic statin use who developed end-stage renal disease in the setting of severe rhabdomyolysis.

CASE DESCRIPTION
- A 74-year-old male presented with two weeks of worsening fatigue, weakness, and weight loss.
  - Past medical history included atrial fibrillation, heart failure with reduced ejection fraction (HFrEF), hypertension, hyperlipidemia, type 2 diabetes on insulin, and CKD stage III.
  - He was hemodynamically stable and on room air. Neurological exam revealed symmetrical proximal muscle weakness of the bilateral upper and lower extremities with failure to resist force at hip flexors with remaining exam normal.
  - Medication reconciliation revealed the intake of daily rosuvastatin and gemfibrozil.

LAB WORK-UP

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CK</td>
<td>9,951</td>
</tr>
<tr>
<td>CRP</td>
<td>1.55</td>
</tr>
<tr>
<td>ESR</td>
<td>114</td>
</tr>
<tr>
<td>ANA</td>
<td>1:80</td>
</tr>
<tr>
<td>TSH</td>
<td>1.10</td>
</tr>
<tr>
<td>HMGCR antibody, IgG</td>
<td>&lt;3 units</td>
</tr>
<tr>
<td>Anti-HMG-URA reductase antibody</td>
<td>negative</td>
</tr>
</tbody>
</table>

MRI revealed diffuse and patchy muscular edema of the bilateral thighs (Figure 1).
- Muscle biopsy was performed following immunosuppressive treatment which revealed marked myofiber necrosis and regeneration consistent with acute rhabdomyolysis.

DISCUSSION
- Statin-associated necrotizing myopathy is an uncommon complication of statins transpiring at any time of treatment and should be discontinued at first signs of intolerance.
  - Early recognition and management are pertinent to prevent worsening rhabdomyolysis and the need for dialysis.
  - Risk of muscle injury is also increased when using gemfibrozil in combination with statins and should be avoided.
  - Due to the heavy reliance on the provider's clinical acumen in the management of patients with statin-associated necrotic myopathy, the need for randomized controlled trials to standardize care should be considered in the future.

SELECTED REFERENCES