INTRODUCTION. Stenosis is frequently seen in those over 60 years of age. With significant stenosis, one may experience multiple neurological symptoms. This case report evaluates a cadaver with multilevel stenotic areas of the spinal cord. RESOURCES. An embalmed 89-year-old female cadaver (of one year) dissected over 8 months. The cause of death was Alzheimer's, dementia, chronic systolic and diastolic congestive heart failure, hypertension, diabetes, and atrial fibrillation. DESCRIPTION. With dissection of the spinal cord, there were multilevel stenotic areas in the cervical, thoracic and lumbar regions. Upon dissecting within the spinal cord, multiple intrathecal calcium deposits were noted in the thoracic and lumbar region. A lumbar laminectomy with spinal fusion was noted at T12-L2. Students speculated that this cadaver would have possible renal failure. They also speculated due to the laminectomy, intrathecal calcifications would form as they often are found post-surgical. In addition, students were able to combine neurological assessment with diagnosis, speculating that this cadaver may have had symptoms associated with spinal stenosis including, but not limited to gait deviations, tingling, numbness, burning, cramping, muscle weakness, loss of sensation, possible loss of sexual ability, and/or loss of bowel or bladder control. Students observed an android body type, stage 3 decubitus in the sacral region, and fat infiltration throughout the multifidus bilaterally which may be found following lumbar surgery. Intrathecal calcifications could have caused intermittent pain and neurological signs but may not have been found unless a CT scan had been performed. SIGNIFICANCE. By speculation, students can learn neurological signs and symptoms which can be associated with stenosis and their future patients and begin applying knowledge to practical scenarios. This allows students to critically think and develop an understanding of the pathophysiology of diseases.