INTRODUCTION
Hajdu-Cheney syndrome, a rare congenital disease, is characterized by acro-osteolysis with diffuse osteoporosis in the absence of other associated diseases. The proposed mechanism by which this occurs has been thought to be reduced bone formation. However, radius bone biopsy has revealed both reduced bone formation and increased osteoclastic bone resorption. This suggests that the osteolysis and trabecular osteoporosis are produced by the same mechanism. The radiographic and clinical sequelae of this syndrome develop and progress with age. Implantable direct current (DC) stimulation has been used in the lumbar spine since the late 1980s and has been shown to benefit spine fusion patients, particularly those considered difficult to fuse. The beneficial effect of DC stimulation on bone graft with or without instrumentation has been well documented in clinical investigations.

METHODS
Under our care surgical treatment consisted of partial anterior vertebrectomy and interbody fusion at C3-4 and C7-T1 using autogenous iliac crest bone graft. Posterior cervical fusion was then performed from C2 through T1 with interspinous wiring. Since consolidation of the posterior graft would be crucial to the success of the construct a direct current stimulator with the cathodes in contact with the posterior bone graft was implanted. Interspinous wiring was performed using the available spines processes with adequate bone quality (Figure 3). Multiple abnormalities were demonstrated intraoperatively. All vertebrae appeared normal with multiple areas of laminae absent, particularly C4, where dura was present with no overlaying lamina. The spines processes of C3 and C4 were completely absent and other spines processes were deficient.

RESULTS
Postoperatively, the patient was unchanged neurologically and placed in a Minerva Cervical Brace for 6 months. Progression of myelopathic symptoms were ceased and neurological improvement was noted (Figure 4a and 4b). The patient is now 10 years post-op with a solid fusion (Figure 5a and 5b).

CONCLUSIONS
The procedure performed, while high-risk, did stop the progression of his myelopathy and progressive deformity. The implantable stimulator may have helped considerably in obtaining a solid fusion in this difficult situation.