Nontraumatic Subluxation of the Atlanto-Axial Joint as Rare Form of Aquired Torticollis: Diagnosis and Clinical Features of the Grisel's Syndrome.

STUDY DESIGN.: Case report and review of the literature. OBJECTIVE.: We report a case of Grisel's syndrom with a delayed diagnosis. The patient's first presentation in our pediatric orthopedics department was 2 month after surgery (cochlea implantation) with a persistent torticollis. Radiographs revealed a subluxated atlantoaxial joint. We treated our patient with manual repositioning and calculated antibiotics, which lead to a restitutio ad integrum within a short time. SUMMARY OF BACKGROUND DATA.: Grisel's syndrome is synonymous with rare nontraumatic, rotational subluxation of the atlantoaxial joint (C1-C2). All formerly reported cases showed a clear association to infection or were related to head and neck surgery. Still, there is a lack of understanding about pathogenetic features and causative agents. In 1977 Fielding proposed a classification of the atlantoaxial subluxation and stage-related therapy was recommended. METHODS.: Our patient was a 11-year-old girl with a torticollis after insertion of a cochlea implant. After surgery, physiotherapy was performed because of her wryneck. As the symptoms did not improve, she was presented in our clinic. Our radiographs revealed a subluxated atlantoaxial joint. RESULTS.: In general anesthesia we performed a manual repositioning and she was temporarily immobilized with a cervical collar for 2 weeks. In
addition, we administered calculated antibiotics, although CRP and leukocytes were not elevated. The follow up showed a good repositioning within a short time. CONCLUSION: At least in this case, our treatment led to shorter recovery and avoidance of halo fixation. Our new therapeutic approach to patients with Grisel's syndrome might lead to a shorter recovery.