Introduction
Nontraumatic spinal cord injury (NTSCI), refers to damage to the spinal cord resulting from a cause other than trauma. It is a condition with immense functional implications for individuals involved. The incidence of NTSCI is difficult to estimate due to its heterogeneous cluster of a wide spectrum etiologies with varying pathophysiology. The most described NTSCI causes are degenerative diseases and spinal stenosis, tumors, and inflammatory conditions. In order to avoid delay in diagnosis and time-critical treatment, knowledge of each is important. We aim to fill the gap of knowledge by assessing the causes, patterns, and outcomes of NTSCI.

Methodology
This retrospective cohort study included all patients who had an NTSCI between 2016 and 2020. In addition, patients aged >18 years and treated surgically were included. Demographic and clinical data were collected. Pre- and postoperative American Spinal Injury Association (ASIA) impairment scales and last follow-up outcomes were assessed.

Result
A total of 124 patients were included. The mean age of our population was 62.8 years with an average BMI of 31; 8% of them were smokers. Upon admission, back pain (45%), numbness (43%), and inability to walk (18%) were the highest recorded clinical presentations. Spinal stenosis (45%) followed by degenerative cervical myelopathy (27%) were the most observed pathologies. Lumbar injuries accounted for 45% whereas cervical injuries accounted for 41% and thoracic injuries for 14%. The average length of stay period was 23.2 days, with 48% of patients transferred to inpatient rehabilitation, and the mean follow-up duration was 15 months.

Conclusion
In summary, after assessing the causes, patterns, and outcomes of NTSCI, our study showed that comorbidities were observed in 85% of patients. Spinal stenosis and degenerative cervical myelopathy were the most common etiologies. Patients who presented with urinary incontinence and/or bowel incontinence upon admission had a significantly worse ASIA score at last follow-up. Degenerative pathologies recorded a worse ASIA score, and thoracic injuries recorded the worst ASIA score improvement compared to cervical and lumbar injuries. In total, 57% of the patients showed full recovery at the last follow-up.