Type: Assignments

Subject: ADVANCED HEALTH ASSESSMENT II AND CLINICAL PROCEDURES ...NRP/571

Subject area: Nursing

Education Level: Masters Program

Length: 1 pages

Referencing style: APA

Preferred English: US English

Spacing Option: Double

Title: Discussion -CT Scans

Instructions: 1....when are computed tomography (ct) scans indicated? 2.....recommend a type of diagnostic image, with or without contrast, for the patient : a patient with persistent lower back pain resistant to conservative interventions 3. and why ????

CT Scans

Name

Module

Module Code

Computed tomography (CT) scans refer to a non-invasive diagnostic imaging procedure that produces horizontal or axial images (slices) of the body. CT scans combines x-rays with computer technologies to create a detailed image of the body part under consideration. CT scans are indicated when they are used to diagnose tumours, evaluate internal bleeding or other internal damages. CT scans can also be utilized to show tissue and fluid biopsy. CT scans can be used to assess head injuries, assessment of multiple sclerosis and management of the central nervous system diseases.

CT scans can be conducted with or without contrasts. Contrasts can be viewed as substances injected into the intravenous line to cause a specified organ or tissue to be seen more clearly before the procedure. CT scans performed on the abdomen offer additional information concerning abdominal organs and structures hence enabling the most preferable interventions to be taken against injuries and diseases. For patients with a persistent lower back pain resistant to conservative interventions, a lumbar spine CT scan should be undertaken. The lumbar spine CT scan should be conducted since it shows injuries and damages in the five vertebral bones, issues in the spine, coccyx, large blood vessels, tendons and cartilage (Jin et al. 2019). Contrasts can be used when conducting the lumbar spine CT scan where contrast materials are usually made of iodine or barium sulfate. Some of the

issues that the health provider should look out for when conducting the scan include degenerative changes as a result of advanced age, birth defects, bone problems, lumbar disk herniation, lumbar spinal stenosis, spondylolisthesis and fracture among others. The patient should be tested or interrogated to determine if they are likely to experience allergic reactions due to the dye used as contrast.

References

Jin, C. B., Kim, H., Liu, M., Han, I. H., Lee, J. I., Lee, J. H., ... & Cui, X. (2019). Dc2anet: Generating lumbar spine MR images from CT scan data based on semi-supervised learning. *Applied Sciences*, *9*(12), 2521.

**References**