

**XYZ - DIAGNOSTIC STUDIES**

DATE	STUDY	FACILITY/PROVIDER	INDICATION	FINDINGS	IMPRESSION	PDF REF
08/31/2017	X-ray of left shoulder	XYZ Hospital	Postoperative reduction	Acromioclavicular joint space appears slightly widened. No definitive fracture	N/A	45-48
09/01/2017	CT of lumbar spine without contrast	XYZ Hospital	Numbness in both feet. Degenerative joint disease of lumbar spine. Status post lumbar spine fusion surgery	There is posterior hardware fusion from L3-L5 with hardware consisting of bilateral pedicle screws at each vertebral level and bilateral vertically oriented rods which is new at L3 level compared to prior study. The left L5 pedicle screw traverses along the lateral margin of the pedicle and there is a lucent screw tract extending 7 mm distal to the tip of the screw. There is no significant paralleling the lucency and no hardware fracture is seen. There is placement of anterior fusion graft in the posterior left posterior aspect of L3-4 disc space.	1. Interval left hemilaminectomy and medial facetectomy at L3-L4 and extension of posterior fusion hardware at the L3 level. Bilateral pedicle screw rod posterior her perfusion is seen from L3-L5. Left L5 pedicle screw traverses along the lateral margin of the pedicle. No suspicious paralleling lucency or hardware fracture. Foci of postoperative air and stranding are noted throughout the lower back soft tissues 2. Status post laminectomy there is resolution of severe spinal canal stenosis at L3-4. Anterior fusion graft has been placed in the left posterior aspect of L3-4 disc space. The graft extends 8 mm beyond the posterior margin of the	53-59
09/05/2017	CT of lumbar spine without contrast	XYZ Hospital	Lower extremity weakness. Po	Post surgical changes are again noted at L3-L4 level with left laminectomy and facetectomy. The interbody fusion graft again extends beyond the posterior margin of the vertebral body into the left lateral recess and left neural foramen. Effacement of the left lateral recess as well as the left neural foramen is present. There are stable postsurgical changes in the posterior paraspinous soft tissues at this level with edema/granulation tissue. A subcutaneous fluid collection with air is also unchanged.	1. Unchanged appearance of postsurgical changes at L3-4 level. The interbody fusion graft is again seen extending into the left lateral recess and left neural foramen causing effacement. Stable posterior paraspinous postsurgical changes are present with subcutaneous fluid collection/air present. 2. Stable appearance of posterior fusion at L3-L5 levels. There is unchanged mild retrolisthesis at L2-3 and L4-5 levels. There appears to be mild loosening of the screws at L5 level. The interbody fusion graft is not completely incorporated at the L4-5 level.	103-104
09/05/2017	X-ray of right foot	XYZ Hospital	Concern for fracture	No definite acute fracture identified. Mild irregularity along the articular surface of the fifth metatarsal base is favored within normal limits. Moderate hallux valgus with small bunion formation. Lisfranc joint alignment is maintained. Normal osseous mineralization.	1. No definite acute fracture identified. Mild irregularity along the articular surface of the fifth metatarsal base is favored within normal limits. Recommend correlation with point tenderness. 2. Moderate hallux valgus with small bunion formation.	258-260
09/06/2017	Left lower extremity arterial study	XYZ Hospital	Left leg pain with coolness of	The common femoral artery has posterior wall plaque which narrows the lumen less than 50%.	Left lower extremity, no significant arterial occlusive disease demonstrated	320-322
09/06/2017	Myelogram of lumbar spine	XYZ Hospital	Left leg pain/numbness/weak	1. There are bilateral pedicle screws from L3-L5. Vertically oriented connecting rods are present. Grafts are present within the intervening disc spaces. There is incomplete filling of the thecal sac at the L3-4 and to a lesser extent along the left lateral aspects of the thecal sac at the L4-5 level. There is underfilling of the left L4 and L5 nerve roots. 2. The right-sided nerve roots at these levels the more normal fashion. There is significant irregularity along the left lateral aspect of the thecal sac at the L3-4 and L4-5 levels	There is under-filling of the thecal sac more apparent to the left of midline at the L3-4 levels. There is irregularity of the lateral margin of the thecal sac on the left at the L4-5 level. There is under-filling of the left L4 and left L5 nerve roots.	416-512
09/06/2017	CT of lumbar spine post-myelogram	XYZ Hospital	Left lower extremity weakness	1. Alignment does not appear changed. There are postoperative changes status post anterior posterior interbody fusion at L3-4 and L4-5. There are bilateral pedicle screws from L3-L5 with vertically oriented connecting rods. Subtle lucency again noted adjacent to the L5 pedicle screws. 2. Level L3-4: There are bilateral pedicle screws at L3 and L4. There are laminectomy defects bilaterally, more extensive on the left with partial facetectomy on the left. The interbody fusion graft extends posterior to the posterior margin of the disc into the disc space and proximal left neural foramen. There is marked distortion of the left posterior and lateral aspect of the thecal sac. The AP dimension of the sac is reduced to about 6.5	1. There has not been a significant interval change in alignment. Pedicle screws are again seen bilaterally from L3-L5 with vertically oriented connecting rods. Lucency distal to the left pedicle screw at L5 and more subtle lucency along the margins of the L5 pedicle screws is again noted. There are vertically oriented connecting rods. 2. the interbody graft at the L3-4 level is posteriorly positioned and to the left of midline extending beyond the posterior margin of the disc space into the subarticular recess and proximal left neural foramen. There is marked distortion of the thecal sac here. There is significant underfilling of the thecal sac	608-612

09/18/2017	CT of lumbar spine without contrast	XYZ Hospital	Low back pain radiology into t	<p>1. L4-L5: Postoperative findings. No central canal zone or subarticular recess stenosis. Moderate bilateral foraminal stenosis present secondary to osteophytes.</p> <p>2. L3-L4: Postoperative findings. 1 mm disc bulge present. Moderate right foraminal stenosis present secondary to disc bulge and osteophytes.</p> <p>3. L2-L3: Moderate left subarticular recess and moderate central canal zone stenosis present secondary to 2 mm disc bulge, moderate facet osteoarthritis and ligament of flavum hypertrophy. No foraminal stenosis.</p>	<p>1. Anterior and posterior lower lumbar spacers and pedicle screw and rod fixation without definite solid bony fusion</p> <p>2. L2-L3 moderate left subarticular recess and moderate central canal zone stenosis</p> <p>3. Multilevel moderate and severe lumbar foraminal stenosis</p>	650-653
11/06/2017	MRI of lumbar spine with and without contrast	XYZ Hospital	Low back pain and difficulty w	<p>1. Left hemilaminectomies are seen at L3-4 and L4-5. Rim-enhancing postsurgical seromas are seen in the laminectomy sites. No epidural fluid collection, phlegmon, or abscess is seen in the lumbar spine. No osteomyelitis diskitis is seen in the lumbar spine.</p> <p>2. Posterior fusion is seen from L3 through L5 with posterior rods fixed by bilateral pedicle screws at each level. Fusion graft is seen in the L4-5 disk space. Enhancing high intensity zone in the posterior annulus of the L3-4 disk suggests the site of previous discectomy. No recurrent bulge or protrusion is seen at L3-4 and L4-5. No abnormal intradural enhancement is seen in the lumbar spine. No arachnoiditis is seen.</p>	<p>1. Left hemilaminectomies are seen at L3-4 and L4-5. Rim-enhancing postsurgical seromas are seen in the laminectomy sites. No epidural fluid collection, phlegmon, or abscess is seen in the lumbar spine. No osteomyelitis diskitis is seen in the lumbar spine.</p> <p>2. Posterior fusion is seen from L3 through L5 with posterior rods fixed by bilateral pedicle screws at each level. Fusion graft is seen in the L4-5 disk space. Enhancing high intensity zone in the posterior annulus of the L3-4 disk suggests the site of previous discectomy. No recurrent bulge or protrusion is seen at L3-4 and L4-5. No abnormal intradural enhancement is seen in the lumbar spine.</p>	680-682
11/30/2017	X-ray of lumbar spine	XYZ Hospital	Low back pain, difficulty walki	<p>1. Laminectomies are seen at L3-4 and L4-5. Posterior fusion is seen from L3 through L5 with posterior rods fixed by bilateral pedicle screws at each level. Radiolucent graft is seen in the L4-5 disk space.</p> <p>2. Mild right convex curvature of the lumbar spine is present. 1 mm anterolisthesis is seen at L3-4 and L5-S1. No lumbar compression fracture is seen. No osseous injury or destruction is seen in the lumbar spine.</p> <p>3. L3-4 and L4-5 disk spaces are mildly narrowed, L1 and L2 pedicles are intact. No ankylosis of the sacroiliac joints is seen.</p>	<p>1. Laminectomies are seen at L3-4 and L4-5. Posterior fusion is seen from L3 through L5 with posterior rods fixed by bilateral pedicle screws at each level. Radiolucent graft is seen in the L4-5 disk space.</p> <p>2. Mild right convex curvature of the lumbar spine is present. 1 mm anterolisthesis is seen at L3-4 and L5-S1. No lumbar compression fracture is seen. No osseous injury or destruction is seen in the lumbar spine.</p>	690-693
12/04/2017	X-ray of bilateral hips with pelvis	XYZ Hospital	Spondylosis without myelopat	<p>Pelvic ring appears intact. No evidence of fracture identified. Both femoral heads are normally outlined and the hip joints are well-maintained. No evidence of fracture or dislocation. No destructive lesions or periostitis identified. Small vascular calcifications project over the pelvis. Postsurgical changes of fusion noted in the lower lumbar spine extending inferiorly to the last lumbar vertebra.</p>	<p>1. Negative AP pelvis and bilateral hips. No joint abnormalities apparent.</p> <p>2. Postoperative fusion changes in the lumbar spine.</p>	694-696
12/04/2017	X-ray of lumbar spine	XYZ Hospital	Back pain and difficulty walkin	<p>Postoperative changes are present as described on the prior study. There is no obvious abnormal motion on flexion or extension views.</p>	<p>Postoperative changes are present as described on the recent study. No abnormal motion apparent on flexion or extension views. There is relatively limited motion demonstrated.</p>	700-702
09/27/2018	MRI of lumbar spine with and without contrast	XYZ Hospital	Lumbar back pain	<p>1. Surgical change: Instrumented posterior fusion at the L3-L5 levels with bilateral pedicle screw and rod construct as well as L4-5 disc spacer device. Left laminectomies are seen at the L3-4 and L4-5 levels. Small nonspecific peripherally enhancing fluid collection within the left L4-5 laminectomy bed.</p> <p>2. L3-L4: Enhancing granulation tissue is seen within the left ventrolateral and dorsolateral epidural space associated with the descending left L4 nerve root as well as within the left neural foramen associated with the exiting left L3 nerve root. Residual right eccentric disc bulge and facet overgrowth contribute to mild to moderate right and mild left neural foraminal stenosis.</p> <p>3. L4-L5: Enhancing granulation tissue is seen</p>	<p>Multilevel lumbar spondylosis, with moderate L1-2 and severe L2-3 spinal canal stenosis and moderate to severe left L4-5 and severe left L5-S1 neural foraminal stenosis.</p>	704-708
11/07/2018	X-ray of bilateral hips including pelvis	XYZ Hospital	Pain	<p>No fracture, dislocation or skeletal lesion. The joint spaces are normally maintained. There is a screw fusion of the visualized lower lumbar spine. No soft tissue abnormality is demonstrated.</p>	<p>Negative study of the hips including the pe</p>	740-750

11/07/2018	MRI of cervical spine without contrast	XYZ Hospital	Cervical spine pain, sensory di	<p>1. At the C2-3 level, the canal is widely patent. However, there is severe facet arthropathy on the right and high-grade foraminal compromise at this level. This shows marked interval progression from the previous exam.</p> <p>2. C3-4 level has minimal disc/osteophyte formation and no spinal canal stenosis. However, there is moderately severe foraminal narrowing bilaterally progressive from previous exam.</p> <p>3. C4-5 level above fusion has well-maintained spinal canal but moderately severe foraminal narrowing, right greater than left, similar to previous study.</p> <p>4. C5-6 level at operative level has well-decompressed canal. There is probable moderate foraminal narrowing on the left. On</p>	Multilevel cervical spondylosis manifested primarily by neural foraminal compromise.	752-758
11/07/2018	MRI of thoracic spine without contrast	XYZ Hospital	Midthoracic back pain	<p>There is edema within the vertebral body marrow space at T6-T9. This is most conspicuous at the T8 and T9 levels where the degree of edema is quite profound. There is also irregularity of the endplates particularly at the T8-9 level concerning for early disc does osteomyelitis. Further evaluation with gadolinium pre and post-infusion is advised for this finding. There is no evidence for any cord compression. The edema extends into the posterior elements particularly at the T8 and T9 levels. A neoplastic process remains in the differential although is considered less likely given the distribution of the edema pattern surrounding the disc space particularly at the T8-9 site.</p>	Multiple sites of vertebral body abnormality as discussed above. Primary differential consideration would be that of multifocal discitis/osteomyelitis with neoplasm considered IGSS likely. Further imaging pre and post gadolinium advised.	760-764
11/19/2018	X-ray of cervical spine	XYZ Hospital	Cervicalgia	<p>Cervical spine show anterior cervical fusion from C5 through C7. There is spondylosis at C4-5. All remaining vertebra and disc spaces are preserved. No instability on flexion and extension views, No fracture or subluxation.</p>	Mild spondylosis at C4-5 with anterior cervical fusion from C5 through C7. No fracture, subluxation or instability.	802-814
03/05/2019	X-ray of lumbar spine	XYZ Hospital	Low back pain radiating into b	<p>Flexion and extension lateral views show a posterior transpedicular screw fusion from L3 through L5. There is a cage at L4-5 but not at L3-4. The hardware is intact. There is 3 mm anterolisthesis of L3 on L4 that does not change between the 2 views. Alignment is otherwise anatomic. The remaining vertebral body heights and intervertebral disc spaces are normally maintained.</p>	<p>1. There is an uncomplicated screw fusion from L3 through L5.</p> <p>2. There is mild anterolisthesis of L3 on L4 that does not change on the bending views.</p>	850-852
03/05/2019	Bone densitometry	XYZ Hospital	Asymptomatic screening	<p>1. Dual energy x-ray absorptiometry of the left femoral neck reveals a bone mineral density of 1.037 gm/cm<sup>2</sup>, for a T-score of 0.2.</p> <p>2. Dual energy x-ray absorptiometry of the right femoral neck reveals a bone mineral density of 1.021 gm/cm<sup>2</sup>, for a T-score of 0.1. According to World Health Organization criteria, normal bone density of the hip is present</p>	This study satisfies WHO criteria for normal bone density of the hips.	854-859
03/05/2019	CT of lumbar spine without contrast	XYZ Hospital	Lumbar spondylosis, lumbar radiculopathy, failed back syndrome. Low back pain with bilateral hip pain and lower extremity numbness.	<p>Redemonstration of postoperative changes to include interbody fusion at L4/5 and posterior fixation with bilateral pedicular screw and rod constructs at the L3-L5 levels. No osseous fusion across the interbody graft or disc space at L4/5. No periscrew lucency, hardware fracture or migration.</p>	<p>1. Redemonstration of postoperative changes to include L4/5 interbody fusion and posterior fixation spanning L3-L5. No arthrodesis demonstrated.</p> <p>2. Spondylosis and facet arthropathy, seen to better effect on prior MRI.</p>	870-875
03/12/2019	EMG/Nerve Conduction Study	XYZ Hospital	Numbness and tingling with pain radiating from neck and shoulders to arms and hands, back, legs and feet.	<p>1. Upper extremity nerve conduction studies: The bilateral median CMAP and SNAP showed prolonged distal latencies, reduced amplitudes and slow conduction velocities through the wrists. The bilateral ulnar and radial CMAP and SNAP and bilateral radial SNAP are normal (nerve conduction studies are attached)</p> <p>2. Upper extremity needle electrode exam: The bilateral upper extremity needle examination showed insertion activity and polyphasic potentials in the bilateral abductor pollicis brevis.</p>	<p>1. Upper extremity nerve conduction studies: The bilateral median CMAP and SNAP showed prolonged distal latencies, reduced amplitudes and slow conduction velocities through the wrists. The bilateral ulnar and radial CMAP and SNAP and bilateral radial SNAP are normal (nerve conduction studies are attached)</p> <p>2. Upper extremity needle electrode exam: The bilateral upper extremity needle examination showed insertion activity and polyphasic potentials in the bilateral abductor pollicis brevis.</p>	880-884

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03/28/2019	X-ray of lumbar spine	XYZ Hospital	Lumbar spondylosis	Patient is status post fusion L4-L5 and L5-S1 with interbody cages. Device projects over posterior elements of L3 with leads coursing cephalad in the epidural space. Multilevel disc disease and facet hypertrophy evident. There is loss of normal lumbar lordosis.	<p>1. Preservation vertebral body height without fracture</p> <p>2. Multilevel disc disease and facet hypertrophy</p> <p>3. Retrolisthesis L3 on L4</p> <p>4. There is no translation on flexion or extension</p>