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Treatment of sacral aneurysmal bone cyst with percutaneous sacroplasty

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Running title; **Sacral aneurysmal bone cyst**

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A 32-year-old male patient was admitted with pain irresponsive to analgesics, reflecting to thighs and anal region, numbness and incontinence. Computed tomography (CT) and magnetic resonance imaging (MRI) examinations revealed a cystic appearance mildly narrowing both S1 neural foramens and not exceeding the bone cortex at S1-S2 levels. Shaped blood elements were detected on biopsy. Percutaneous sacroplasty (PS) was planned to relief symptoms of the patient. Digital subtraction angiography (DSA) was performed to determine the vascularity of the lesion and it was

detected to be hypovascular (Figure 1). Twenty cc of cement was injected to both sides of the lesion under fluoroscopy guidance. The cement was seen to remain within the borders of the sacrum on control CT images (Figure 2). While Visual Analog Scale score was 10 before the procedure, it regressed to 2 after it. Symptoms of the patient improved significantly.

Figure Legends;

Figure 1. A cystic mass lesion was observed on CT (A) and MR (B, C) images. The lesion was proven to be an aneurysmal bone cyst on fluoroscopy-guided biopsy (D). The lesion was seen to be hypovascular on DSA (E, F).

Figure 2. Percutaneous sacroplasty procedure (A) and (B) distribution of the cement are seen. Distribution of the cement in the sacral mass is seen on CT performed after the procedure (C).