Massive, Previously Undetected Cancer Metastasis Revealed by Application of a Depot Antipsychotic: A Case Report

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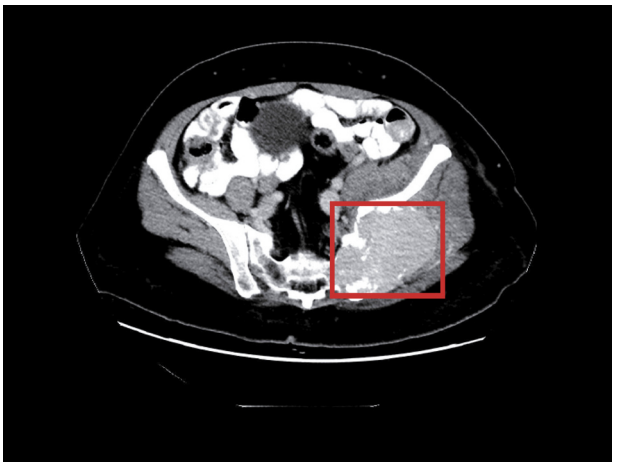
Schizophrenia patients have a dramatically reduced life-expectancy compared to the general population and to patients suffering from other mental illness.[1,2] This excess mortality can be linked to a significantly increased predominance of physical illness in schizophrenia patients, and there are various interacting etiologic factors that may account for this. Aside from factors relating to biology, treatment, and lifestyle—which, for instance, expose patients to an increased risk of cardiovascular disorders—reduced access to general health care systems and, in particular, the underdetection of somatic disease are important possible explanations of excess mortality[3,4]

Case report. Ms A, a 56-year-old female patient who had been suffering from paranoid schizophrenia (*ICD-10* and *DSM-IV* criteria) for 26 years and had a recurrent disease course characterized by poor treatment compliance, was admitted to our hospital with a relapse of her disease and showed clinical symptoms of delusions, thought incoherence, and thought broadcasting. She was initially treated with oral benzodiazepines and risperidone, with the future intention being to switch to intrasmuscular application of depot risperidone in order to improve compliance. We started the first injection of 37.5 mg risperidone (Risperdal Consta, Janssen-Cilag) in her left gluteus medius muscle. Following this, Ms A complained of pain in the region of her left hip, which worsened when she moved her leg. However, neither the neurologic nor the orthopedic examination revealed a pathologic finding. For further investigation, we performed an x-ray of her left hip, which showed a mild-to-moderate arthrosis, but no fracture or other pathology. Therefore, the initial pain was traced back to a local tissue reaction to the depot antipsychotic. The pain resolved almost completely with treatment with nonsteroidal anti-inflammatory drugs, and she tolerated the next application of risperidone into her right gluteus medius muscle well.

After the third injection, this time in her left gluteus medius muscle, the pain returned and she was almost incapable of standing and ambulating on the left leg. As Ms A's pain increased continuously, we discussed the issue with the surgical department and performed magnetic resonance imaging. This showed a 10×6–cm mass in the left gluteus medius and minimus muscles (see Figure 1), infiltrating Os ileum and Os sacrum with inhomogeneous contrast enhancement. Further staging with computed tomography scans of the suspicious region (see Figure 1) and of her chest and abdomen showed several masses in her right kidney, liver, and fourth thoracic vertebral bone. A biopsy of the mass in the left gluteus medius muscle was performed and showed a metastasis of well-differentiated follicular thyroid cancer. Remarkably, in 1999, her right thyroid lobe had been resected because of a thyroid gland nodule with no signs of malignancy.

Figure 1. Axial Slice of the Computed Tomography Staging Examination 70 Seconds After Intravenous Injection of Contrast Media (venous phase) Using a Window Setting for Soft Tissue Reading[a]



[a]Typical signs of malignancy are present within the red rectangle: enlarged, destructive sacral and iliac bone masses as well as infiltration into the gluteus medius muscle (image courtesy of M. Reiser, MD).

After diagnosis, she was treated with localized irradiation of the metastasis for pain control and resection of her left thyroid gland, and consecutive radioactive iodine therapy was planned. A thyrotropin-suppression therapy was not recommended by the consulting endocrinologists. Together with this oncology treatment, continuous treatment with 50 mg depot risperidone (applied to the right gluteus medius muscle), 2 mg oral risperidone, and 15 mg olanzapine was administered. Following completion of the localized irradiation, she was discharged from our hospital with no signs of acute psychosis, and further treatment was initiated in our outpatient clinic.

As the symptoms of our patient changed at every point of contact we had with her, we also considered her physical complaint to be of a psychosomatic nature. We assume that the application of the depot antipsychotic induced a local reaction in the muscle, which triggered a tumor-associated pain reaction. This case illustrates that physical complaints

of a mentally ill patient must be taken seriously and that they should be investigated further. Local irritation, arthralgia, and myalgia are frequently reported after injection of depot antipsychotics, but this case illustrates dramatically that depot-associated pain can signify a severe physical condition.

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Drug names: olanzapine (Zyprexa), risperidone (Risperdal and others).
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