

## Dr. Sugawara et al reply

### *To the Editor:*

We sincerely thank Dr. Wang et al for their comments<sup>1</sup> in response to our manuscript, "IgG4-related Disease Mimicking a Paratesticular Tumor and Pelvic Lymph Node Metastasis."<sup>2</sup> Our case report demonstrated IgG4-related paratesticular pseudotumor and lymph node metastasis-like pelvic fibrosis.

As Dr. Wang et al pointed out, testicular involvement of IgG4-related disease is relatively rare; therefore, it is sometimes misdiagnosed as testicular malignancy. Specifically, our patient had fibrotic mass in pelvis, mimicking a metastatic obturator lymph node.<sup>2</sup> If there had been fibrotic mass in a more atypical location, the urologist might have considered IgG4-related disease. Since the majority of patients with IgG4 testicular involvement will visit urologists first, collaboration between urologists, rheumatologists, and pathologists is required for appropriate diagnosis and treatment. Although serum IgG4 levels are useful for screening, their specificity and sensitivity are limited. Approximately 20% of patients with IgG4-related autoimmune pancreatitis have normal serum concentration.<sup>3</sup> On the other hand, elevated serum IgG4 was observed in 22% of the non-IgG4-related disease population.<sup>4</sup> We should not overestimate serum IgG4 concentration as a marker of IgG4-related disease. As Dr. Wang et al commented, orchiectomy could have been avoided if preoperative testicular puncture biopsy had been performed in our patient. In addition to testicular puncture biopsy, the usefulness of magnetic resonance imaging<sup>5</sup> and intraoperative frozen section assessment<sup>6</sup> have been reported for differentiating benign pseudotumor from malignancy.

Again, we thank Dr. Wang et al for giving us an opportunity to discuss our case report. We believe that this case report will alert rheumatologists to the importance of differentiating IgG4-related disease from malignancy to avoid unnecessary surgical interventions.

Eri Sugawara<sup>1</sup> , MD, PhD

Taiki Sato<sup>1</sup>, MD, PhD

Kazuaki Katsumata<sup>1</sup>, MD, PhD

<sup>1</sup>Department of Rheumatology, Tonan Hospital, Sapporo, Japan.

The authors declare no conflicts of interest relevant to this article.

Address correspondence to Dr. E. Sugawara, 060-0004 N4W7, Chuo-Ku, Sapporo, Japan. Email: e.sugawara@huhp.hokudai.ac.jp.

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