Treatment of PVNS of the Knee

To the Editor:

We are in the process of writing a manuscript about the long-term results of a large series of patients with localized pigmented villonodular synovitis (LPVNS) of the knee joint treated arthroscopically and with a miniopen technique. We were very pleased to read the work of Aurégan et al., "Treatment of Pigmented Villonodular Synovitis of the Knee," published in the October issue of *Arthroscopy*.[1] Reviewing the literature ourselves we noticed that there are plenty of studies reporting the results of series with a limited number of patients. This is normal because PVNS is a rare disease and a review and meta-analysis of the existing literature is a validated method of drawing conclusions from larger number of patients.

However, we noticed some inaccuracies regarding the reported numbers. According to Table 1, Dines et al. reviewed 26 patients, 12 of whom were treated arthroscopically and 14 with open synovectomy with a mean follow-up of 1.7 years. Reading the original article carefully, Dines et al. stated that only 10 patients were available for long-term follow-up, all of whom were treated arthroscopically and responded to the Lysholm knee scoring scale (average, 65.8 months postoperatively), but only 7 were evaluated with a clinical examination. Because the inclusion criteria were studies reporting the results, the study of Dines et al. should have been either excluded or part of it included in the review. Furthermore, according to Table 1, Schwartz et al. had 2 patients with arthroscopic synovectomy with no recurrence and 12 with open synovectomy and 2 recurrences. Again, reading the original article reveals that there were 12 instances of LPVNS in the knee, 3 of which were treated arthroscopically and the remaining 9 with excisional arthrotomy. There were indeed 2 patients with recurrent disease, but the authors do not mention how they were treated. As a result, it is not safe to include these 2 in the open synovectomy group. Finally, Perka et al. reported on 18 cases of knee LPVNS with a follow-up of 5.6 years. We were unable to find any details of the operative procedure in the manuscript apart from a phrase stating "all tumours were surgically excised." According to Table 1, 2 were treated arthroscopically and 16 with an open technique with a follow-up of 6 years. However, reading the original article this division seems arbitrary and the follow-up inaccurate.

We acknowledge the authors' effort and we hope that adjusting the tables with the correct numbers does not affect the conclusions drawn from their analysis.

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Note: The authors report that they have no conflicts of interest in the authorship and publication of this letter.

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Reference

1. Aurégan J-C, Klouche S, Bohu Y, Herman S, Hardy P. Treatment of pigmented villonodular synovitis of the knee. *Arthroscopy* 2014;30:1327-1341.

Authors' Reply

To the Editor:

Allow us to reply to the letter you received from Filon Agathangelidis, Achilleas Boutsiadis, and Stergios Papastergiou commenting on our article, "Treatment of Pigmented Villonodular Synovitis of the Knee." We would like to thank these authors for the interest they showed in our study and for the effort they went through to verify our data. Obviously, the methodology of a systematic review cannot be flawless even if we tried to minimize the risks using a detailed methodology. In fact, Agathangelidis et al. drew your attention to some of our data they thought were incorrectly interpreted.

First, they contested the inclusion of a study by Dines et al. because after a first evaluation at midterm, only a part of their series was available for long-term evaluation. Given the fact that Dines et al. reported the recurrence rate after surgical excision of localized pigmented villonodular synovitis (LPVNS) at a follow-up greater than 1 year, their study met our inclusion criteria.[1] Being aware that only a part of the original series was available for long-term results, we displayed

only the recurrence rate of the initial series with a 1.7-year mean follow-up in Table 1. We agree that functional outcomes of many included studies should then be carefully interpreted, as we warned the reader several times in our article.

Second, Agathangelidis et al. estimated that the series of patients reported by Schwartz et al. was insufficiently detailed and should not be included in our review either. We agree about the relative complexity of this study, but because it met the inclusion criteria it was included in our review.[2] However, as mentioned in the Methods section of our article, the data of this study were examined and analyzed by consensus of all 6 authors. First, Schwartz et al. wrote in their article that they performed "two operative arthroscopies" and, in another part, which Agathangelidis et al. referred to, that there were 3 other arthroscopic surgeries. It was then decided to retain the first mention to not overestimate the recurrence rate of open surgery. Second, Schwartz et al. displayed the recurrences of LPVNS in a table showing that only knee LPVNS recurred. Then, because they also stated that "Among those who had excisional arthrotomies, two (8%) had recurrence and 11 (15%) did not," we decided to include these cases as "LPVNS recurrence after open surgery."

Finally, Agathangelidis et al. wrote you that they were unable to find any details of the operative procedure in the Perka et al. study. However, Perka et al. stated in their article that the "resection of the tumour and the surrounding tissue was performed after arthrotomy in 16 cases and arthroscopically in 2 cases."[3]

In conclusion, there is no need for us to change the data that we displayed in our article. Again, we would like to thank Agathangelidis et al. for acknowledging the efforts we made to perform this review and we would like to wish them good luck in their ongoing study.

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3. Perka C, Labs K, Zippel H, Buttgereit F. Localized pigmented villonodular synovitis of the knee joint: Neoplasm or reactive granuloma? A review of 18 cases. *Rheumatology (Oxford)* 2000;39:172-178.