Take a Cox-2 and call me in the morning...really?

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Kaiho and colleagues have presented a novel case in *The Journal*, and I will fully admit that when I was asked to review the manuscript that I was highly skeptical of its merits simply because it was a case report. But I set my own bias aside and started to read. I'm not sure if it was post-traumatic stress disorder from complicated reoperative resections for desmoid tumor that I participated in during my training and a desire to avoid that type of post-traumatic stress disorder in the future, or the dramatic results presented by the authors, but I found this case very novel yet applicable to practice.

The authors report a case of recurrent desmoid tumor that was successfully treated with meloxicam only based on the presence of a catenin beta 1 gene mutation in the tumor.¹ On review of the imaging, the team was able to avoid a morbid, reoperative resection for the patient that would have involved resection of multiple ribs and a complicated reconstruction. The results with meloxicam treatment were quite durable as well, with a 4-year disease-free interval reported. The authors suggest that the presence of the somatic mutation type of the *CTNNB1* gene may be a good biomarker for efficacy of treatment with meloxicam.

My skepticism about the scientific merits of this case report persisted until I consulted PubMed and started reading through the 24 citations listed for "Cox-2 and desmoid."²⁻⁴ I was surprised to see several other case reports detailing nonthoracic desmoids and their excellent response to therapy with Cox-2 inhibitors. There was one particularly interesting case in which a 10-cm pancreatic

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Central Message

Cox-2 inhibitors may offer an alternative to re-resection for patients with desmoid tumors.

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head desmoid tumor showed no recurrence for 24 months with adjuvant Cox-2 inhibitor treatment.³ Clearly, more data are needed before widespread use, but for these rare tumors, these cases are compelling and this management should be considered when contemplating a morbid resection of recurrent desmoid tumor. It's not quite "take a Cox-2 and call me in the morning," but maybe someday.

References

1. Kaiho T, Nakajima T, Nishida Y, Yoshino I. Successful treatment of a recurrent chest wall desmoid tumor with COX-2 inhibitors. *J Thorac Cardiovasc Surg*. 2019;157:e195-7.
2. Yang S, Wang X, Jiang H, Wang Y, Li Z, Lu H. Effective treatment of aggressive fibromatosis with celecoxib guided by genetic testing. *Cancer Biol Ther*. 2017;18:757-60.
3. Wang Y-C, Wong J-U. Complete remission of pancreatic head desmoid tumor treated by COX-2 inhibitor-a case report. *World J Surg Oncol*. 2016;14:190.
4. Sakai T, Nishida Y, Hamada S, Koike H, Ikuta K, Ota T, et al. Immunohistochemical staining with non-phospho beta-catenin as a diagnostic and prognostic tool of COX-2 inhibitor therapy for patients with extra-peritoneal desmoid-type fibromatosis. *Diagn Pathol*. 2017;12:66.