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Beyond the Scalpel: When TGCT Surgery Isn't the Solution

Announcer:

Welcome to CE on ReachMD. This activity is provided by AGILE and is part of our MinuteCE curriculum.

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Dr. Van de Sande:

This is CE on ReachMD, and I'm Michiel van de Sande. Today we are examining the role of surgical intervention and its limitations in treating tenosynovial giant cell tumor, or TGCT.

TGCT is split up into easy-to-treat surgically and difficult-to-treat surgically.

There is a subtype of localized or nodular TGCT in the larger joints in extremities. They can arise everywhere, but most of them are in the knee. They are small, often single nodules. They are based intra-articularly. They are circumscribed and easy to resect, so safe for surgery.

And then there is a very difficult-to-treat diffuse subform. The majority of these patients are young, and the disease is presenting itself in the knee. But in the diffuse type, it's not only inside the knee; it can be inside and outside of the joint. It's destructive, growing in the cartilage lining, in the synovial lining, but also in the bone. It causes joint degeneration, complaints of pain, movement problems, and loss on quality of life and work.

So the treatment of this very diffuse disease is much more difficult than in nodular or localized where surgery is often curative, because surgery in diffuse disease is very difficult.

And if we look at the 5-year survival of patients that had a synovectomy, a complete resection of all tissue that is affected by this disease, we can see that in localized disease, which is easily resected, 83% of the patients have a successful treatment and are cured. But if we look at diffuse disease, 55% of the patients are cured, and probably even less so if we would follow them up longer.

And the only and biggest risk factor for having a local recurrence or a progressive disease, if you want, is having one before. So if you've had a local recurrence after a complete synovectomy, the chance of you being cured is almost zero.

There has been a long debate about the difference in outcome between arthroscopic and open synovectomies, but over a thousand patients compared, no difference in recurrences nor in complications or in follow-up and rehab were found.

So if we look back at our surgical evidence, there is a clear-cut evidence that more than 50% of all TGCT patients with diffuse disease in





any joint will recur. And when you have a recurrence, you're almost certain that you will have another one. So residual disease is a clear indicator of worse outcomes, both on MRI and in clinic.

But if you can achieve a complete resection, then you can expect a curative treatment. And if you cannot, maybe you should start to think about getting other treatment modalities in your armamentarium and use or combine systemic or other treatment modalities together with surgery.

Patients with a tumor that is regarded not amendable for surgery, meaning possibly better treated with systemic therapy, is a patient that has a TGCT tumor for which the balance between surgical risks and benefits is unfavorable. In these patients, the likelihood of achieving a cure or a long-term disease control with functional survival and functional recovery, meaning a back to work, back to sports, and normal ADL, is outweighed by the high risk of local recurrence or disease progression, prolonged rehabilitation, and long-term complications such as joint damage and loss of function.

And that's all the time I have for today. I hope this brief review was useful in your practice, and thank you for listening.

Announcer:

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