

The safety and result of intratumoral steroid injection for aggressive fibromatosis

Dumnoensun Pruksakorn^{1, 2}

Olarn Arpornchayanon¹

Areerak Phanphaisarn¹

Saratwadee Lorsomradee³

Natthapong Kosachunhanun⁴

Pimpis Teyakasem¹

Jongkolnee Settakorn⁵

- 1) Orthopedic Laboratory And Research Netting (OLARN) Center, Department of Orthopedics, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 2) Excellence Center in Osteology Research and Training Center (ORTC), Chiang Mai University, Thailand
- 3) Department of Anesthesiology, Faculty of Medicine, Chiang Mai University
- 4) Endocrinology unit, Department of Internal Medicine, Faculty of Medicine, Chiang Mai University
- 5) Department of Pathology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

Corresponding author: Dumnoensun Pruksakorn, M.D., Ph.D

Musculoskeletal Oncology Unit, Department of Orthopedics, Faculty of Medicine,

Chiang Mai University, Chiang Mai, Thailand

Tel: 66-53-945544

Fax: 66-53-946442

E-mail: dumnoensun.p@cmu.ac.th

Abstract

Introduction

Multiple recurrence of aggressive fibromatosis (AF) after surgical resection is the clinical challenge. Non-surgical treatment becomes alternative role aiming for controlling of pain, tumor size, and maintain function of extremities. Inflammation is one of the causative in tumor progression, and long term NSAIDs use might create complications. Herein, intratumoral steroid injection was used. The safety margin of local used with high dose steroid and clinical outcome were reported.

Materials and Methods

Phase I clinical trial study to evaluate the safety and result of particulated corticosteroid use by intratumoral injection of AF. This study protocol approved by ethical committee of Faculty of Medicine, Chiang Mai University ORT-12-1184-FB(ID:1184). Ten patients with recurrent, and progressive fibromatosis were enrolled. Ten mg/mL kenacort was used (totally not over than 80 mg/episode and total dose is 3 mg/kg/year). The injection will be operated monthly for 3 consecutive times. Patients were follow up monthly until 3 months after last injection (totally 6 months). Short and long term complications from procedure and from locally steroid use were monitor, as well as pain, functional score, tumor size. The pain score, functional scale and tumor signal of pre-and post injection will be compared by using non-parametric test, Friedman test. The relation between dose of corticosteroid and percent of tumor regression uses Peason's correlation. All statistical analyses will be performed using STATA version 11.

Results: There were 10 recurrent aggressive fibromatosis participated in this study. Eight patients were able to comply the full evaluation process. There was no minor and major complications reported. Two case presented the significant increase blood pressure. The triamcinolone level was increase after 24 hour injection. However, there was not interrupt the ATCH axis was shown. The significant improving pain and functional score. Tumor size were stabilized during treatment.

Discussion: Intratumoral injection is alternative procedures for recurrence fibromatosis without the significant procedure related complications. The long term monitoring will be required for identifying the proper doses for leasing the steroid complications.

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