STEROID FOR MANAGEMENT OF PSEUDO-OTHEMATOMA

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ABSTRACT

Has conducted research on the use of steroids triamsinolon asetonid as pseudo-othematoma medical therapy. The purpose of this study was to determine the effectiveness triamsinolon asetonid. Prevention of the formation of serum in the lesion, so that pseudo-othematoma can be cured without surgery. Surgery and preventing of the formation collagen tissue in the lesion, so that the pseudo-othematoma can be cured without deformity. It is expected the establishment of a pseudo-othematoma practical for health personnel, effective, efficient, safe and comfortable for the patient. This study design is the design of a randomized controled pretest-postest design. In the test group were treated with triamsinolon asetonid intracutaneus injected in lesion area with the number according to the percentage of the amount of teraphy effusion before. Then press verban installed. In the control group, only pressing verban installed. From the research results obtained, whish after the third treatment using the triamsinolon asetonid, pseudo-othematoma disease looked very meaningful. Due to its unique histological structure of the ear, then the manipulation of the ear is moe advisable to be careful, to prevent new lession with various impacts.

Key word: Steroids, Management, Pseudo-othematoma.

INTRODUCTION

Pseduo-othematoma are heaps of serous fluid between the perichondrium and ear cartilage. Also by the name of seroma⁽¹⁾. The literature of the first initial report with the name calling Pseudocyst⁽²⁾. Source literature until recently still used, both in literature and science magazines, because the material is relatively more extensive discustion.

The main cause is the trauma in which the helix is a prominent part of the head to the side so that the most likely to experience trauma^{(3,4).}

Judging from the way pseudo-othematoma illness is part of othematoma. The difference lies in the severity of pathological abnormalities that occur. When a trauma is not string enough to cause rupture of blood vessels only networks reaction will occur, resulting in the accumulation of serum perichondrium. Another factor that is the locus of resistance to minoris certain areas on the ear linked with the embryological development of the ear region from the first meeting of the arch and the second brankialis. This resistance locus minoris are predisposing factors for the occurrence of degeneration in the next period, especially in a state kacheksia⁽²⁾. Other predisposing factors are histological structure of the ear skin of lateral side firmly attached to the connective tissue that make up perichondrium. Perichondrium while not attached tightly to the cartilage underneath, so when the trauma and / or in the conditions mentiod above, cartilage perichondrium and prone beneath each other disposition^{(5).}

Trauma mentioned above will lead to increased permeability of blood vessels. Trauma will cause tissue damage and the damaged tissue will be issued a mediator, one of which is histamine which can affect the endothelial tight junctions. Therefore, serum would be out of the blood vessels and accumulated in the gap between the cartilage and ear perichondrium. Tumor necrosis factor TNF – α is released from damaged tissue, will stimulate the formation of collagen^{(6).}

To have attempted to overcome a variety of ways but the liquid form again, and this situation does not often leave deformities of auricle thickening^(7, 8, 9, 10).

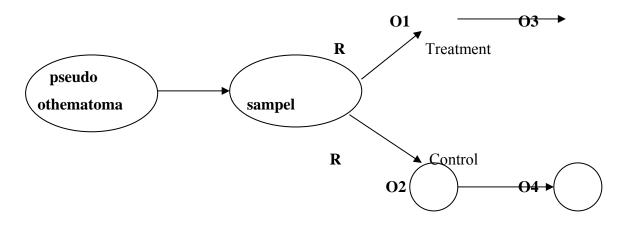
Triamsinolon asetonid like other steroid preparations through the glucocorticoid receptor complex formation in the cytoplasm, which then penetrate into the cell nucleus and the role of inflammation mediators inhibit the formation of local cell lesions^{(11).} Thus triamsinolon asetonid work for^{(12, 13, 14).} (1) improve the permeability of capillaries that

sustained serum in the lumen; (2) maintain the integrity of the plasma membrane and the cell membrane, so that the destruction of the cell and organelle swelling of the cytoplasm can be restored and prevented; (3) lisosome stabilization by maintaining membrane integrity; (4) to prevent fibroblast proliferation, thus preventing the formation of scar tissue.

MATERIAL AND METHODS

Research design

This study used a randomized design controlled pretest-postest design, to determine the effectiveness of disease triamsinolon asetonid pseudo-othematoma with protocol design (design protocol) as follows:



Note:

- R : Allocation random permuted blocking with random sampling
- O1 : the treatment group pre-treatment.
- O2 : pre-treatment control group.
- O3 : Effect on treatment group.
- O4 : Effects on the control group.

Control group : The group that received therapy aspirations and dressing press.

Treatment group : The group that received aspirations therapy and triamsinolon asetonid.

Place and time research

Research carried out in Section / ENT- Head and Neck Surgery Department / Health Sciences Faculty of Medicine (UNUD) / Sanglah Hospital Denpasar. The study began early in January 2009 until the fulfillment of a theoretical sample of late September 2009, and performed on every working day.

Giving way medicine

Group test: Pinna disinfected with alcohol 70%. After aspiration of the effusion by researchers with the syringe using a needle size 23 G x 1 1/4, the test group injected triamsinolone asetonide prepared in 1cc syringe.

Triamsinolone injected intra-cutaneous doses as follows(15).

- a. ≤ 0.5 cc effusion required 1 / 3 of it.
- b. Effusion > 0.5 to 1.0 cc is required 1 / 4 of it.
- c. Effusion> 1.0 to 1.5 cc is required 1 / 5 of it.
- d. Effusion> 1.5 to 2.0 cc is required 1 / 6 of it.
- e. Effusion> 2.0 to 2.5 cc is required 1 / 7 of it.
- f. Effusion > 2.5 to 3.0 cc is required 1 / 8 of it.
- g. Effusion > 3.0 to 3.5 cc is required 1/9 of it.
- h. Effusion> 3.5 cc required 1 / 10 or less it.

Treatment do it for three times, the 1st day, 3rd day, and 5th day, and evaluation conducted on the 3rd, 5th, and 7th day. For patients who recovered, the evaluation was also performed on 2 weeks. If the of the 3rd evaluation, the day of the 7th, patients had not healed, treatment declared unsuccessful. In contrast to patients who have recovered to-3rd treatment, no longer receive treatment and the patient remained present for the evaluation according to the schedule previously set. For patients testing revealed no recovery after the study, sought other treatments, such as gypsum fixation.

Control group: Pinna disinfected with alcohol 70%. Aspirations performed by researchers with a needle syringe disposible size 23G x 1 1/4. For the control group fitted with a bandage deper press fixation. Treatment do it for three times the 1^{st} day, the 3^{rd} day,

5th day, and evaluation conducted on the 3rd, 5th, and 7th day. For patients who recovered, the evaluation was also performed in 2 weeks. If the evaluation of the 3rd day, and the day of 7th, patients had not healed, treatment declared unsuccessful. In contrast to patients who have recovered before the 3rd day treatment, no longer receive treatment and only replacement of dressing so that the patient remains present for the evaluation according to a predetermined schedule. For patients who declared did'nt cured after the study, sought other treatments, such as aspiration and gypsum fixation.

RESULTS

This research was conducted from early January 2009 until the end of September 2009 carried out a study of 15 subjects with pseudo-othematoma. Of 15 patients, 7 patients evaluated in the test group and 8 patients in the control group.

Subject characteristics:

All patients in this study were male. The youngest age was 26 years old and the oldest 65 years (Table I).

No.	Name	Age	Sex	DC	R/L	Size	TSL	RV	KM
1.	NS	38	Μ	07	R	10 X 9	Т	+	-
2.	HD	38	Μ	05	R	6 X 5	Т	+	-
3.	MG	58	Μ	11	L	12 X 11	Т	+	-
4	MK	36	Μ	07	L	11 X 10	Т	+	-
5.	AI	25	Μ	09	R	16 X 15	Т	+	-
6.	MN	40	Μ	11	R	8 X 6	Т	+	-
7.	PA	30	Μ	24	R	9 X 8	Т	+	-
8.	KW	36	Μ	07	R	17 X 16	Т	+	-
9.	GS	26	Μ	06	R	15 X 14	Т	+	-
10.	SK	33	Μ	16	L	18 X 16	Т	+	-
11.	IM	51	Μ	06	R	14 X 12	Т	+	-
12.	BH	65	Μ	14	R	11 X 9	Т	+	-
13.	NW	31	Μ	22	R	15 X 12	Т	+	-
14.	NP	45	Μ	06	R	17 X 15	Т	+	-
15.	MS	43	Μ	06	R	12 X 11	Т	+	-

Table I

List of Pseudo-Patient othematoma

Description: DC: The duration of Complaints In Day Counts

R : Right
L : Left
TSL: transilluminates
RV : Rivalta
GM : Germs
M : Men
W : Women
Q : Light
G : Dark
M : Male
Age: Age In Years
Size: Size In Mm

Results Clinical use as therapy Triamsinolon Asetonid Medika-mentosa Pseudoothematoma

Table II

Clinical results Triamsinolon Asetonid use as therapy Medical Pseudo-othematoma

	Trial	Control	result
Recover	7	1	8 (53,33%)
Not cured	0	7	7 (46,67%)
Result	7	8	15 (100%)

As a result of the end use of triamsinolon asetonid pseudo-othematoma can be seen in Table II. Of those tested statistically using Chi Square test with Yates' correction.

$$\alpha = 0.01$$

d f = 1
X2 table = 6.63

X2count 7.41 > 6.63, then HO is rejected. Use Results Triamsinolon means Asetonid as Pseudo-othematoma Medical therapy has a benefits or meaningful.

DISCUSSION

The pupose of this study as mentioned before is to determine efficacy in the treatment triamsinolon asetonid pseudo-othematoma, is an attempt to get a way practical medical treatment of pseudo-othematoma for health personnel and the effective, efficient, safe and comfortable for the patient.

All patients in this study were male. This study reported on 15 patients with the youngest aged 26 years and the oldest 65 years.

Engel found the youngest aged 25 years and the oldest 44 years^{(2).} Hartmann is quoted $Engel^{(2)}$ reported 12 cases, all found in the young adult age, with good health status. Meanwhile, at the age of 50 years and over according to Engel cited $Meyer^{(2)}$, tend to be formed a hematoma.

In this study 15 patients obtained from all men. This is in accordance with the literature. But there is no literature pertaining to the background of these sex differences. Mentioned only one of the causes of pseudo-othematoma is a result of the minoris locus, because embryological development is not running as it should. Besides the histological where the structure of the lateral lobe skin clung with perichondrium, while perichondrium loosely attached to the cartilage^(3, 5).

The results of the clinical use of steroids triamsinolon asetonid as pseudoothematoma medical therapy have adequate properties. Thus the purpose of disease control was achieved pseudo-othematoma practical, effective, efficient, safe and comfortable.

CONCLUSION

From this research can be concluded that the use of steroids is Triamsinolon Asetonid as pseudo- othematoma medical therapy proved very effective.

BIBLIOGRAPHY

Kopera,D., Soyer,P. Smoll,J. Pseudcyst of the Auricle, Ot hematoma and Otoseroma : Three Faces Of the Same Coin. *European Journal of Dermatology*, 10 : 451 – 4. 2000.

Engel, D. Pseudosysts of the Auricle in Chinese. Arch. Otolaryngol. 83: 179-202. 1966.

- Calhoun, K.H. Auricular Trauma. In: Bailey B.J., Johnson J.T., Kohut RI. Pillsbury III HC., Fardy ME., (eds.) *Head and Neck surgery otolaryngology*. 3rd. Ed. Philadelphia : Lippincott Williams & Wilkins. P. 732. 2001
- Lee,K.J. Essential Otolaryngology Head & Neck Surgery. 8th. Ed. New York, Chicago, San Fransisco, Lisbon, London, Madrid, Mexico City, Milan, New Delhi, San Juan, Seoul, Singapore, Sydney, Toronto: Mc Graw-Hill. P. 512 – 516. 2003.

Bloom & Fawcett. Concise Histology. 2nd. Ed. London : Arnold. p. 315 – 18. 2002.

- Bratawidjaja, K. G. Imunplogi. Jakarta: Balai Penerbit FK UI. Hal. 315 333. 2002.
- Okashi,C. *Hematoma of Auricle*. <u>http://www.Supermemo.com/Englishmem 1998.htmc</u>. Accessed March 15, 2003.
- Cochran, J. Treatment of Acute Auricular Hematoma. Laryngoscope. 90: 1963-4. 1980.
- Lane, S.E., Rhome, G.L., Wroble, R.L. The Physician and Sport Medicine, 26:1-4.1998.
- Watanabe, N., Murakami, S. Treatment of Auricular Hematoma and Removal of Fereign Body in External Ear Canal. <u>http://sciencelinks.jp./j-east/article/200121/000020012101A064048.php. Accessed February 7</u>, 2008. 2007.
- Staehler, R., Lumbar Epidural Steroid Injections For Low Back Pain And Sciatica. <u>http://www.spine-health.com/topics/conserv/epidural/feature/Ep01/html</u>. Accessed February 7, 2008.
- Desrosiers, M., Baroody, F.M., Naclerio, R.M., Allergic Rhinitis. In : Ballenger, J.J., Snow, J.B. (eds). *Otorhinolaryngology Head and Neck Surgery*. 15th. Ed. Philadelphia : A Lea & Febiger. P. 135 – 146.1996.
- Laurence, Bennet, P.N., Brown. *Clinical Pharmacology*. 8th. Ed. Edinburgh. P: 601-3. 1997.
- Trevor, A. J. Katzung, B.G. Masters, S.B *Pharmatology*. 6th. Ed. Newyork. A. Large Medical Books. P. 345. 2002.
- Sudana, W., Suardana, W. The Use of Triamcinolone Acetonide for Pseudo-othematoma Without Tight Bandage. In : Abstract 5 th Asean Otorhinolaryngologycal Head and Neck Congress. Jakarta. P. 82. 1992.