the patients were on the "D" account of endocrinologists, received an adequate correction of occurred violations.

## Conclusions

- 1. Complex pre-operative examination of patients with nodular formations of the thyroid gland allows to assess correctly the nature of pathology and to perform an adequate surgical intervention.
- 2. The main causes of relapse and repeated operations are: inadequacy of the first operation, absence or non-usefulness of preventive therapy in the postoperative period, not elimination of primary pathogenetic factors.
- 3. All operated patients should be on the "D" account of the endocrinologist, which will allow to identify hormonal disorders and morphological changes in the "thyroid remainder" and make an adequate correction.

#### **Bibliography**

- 1. Petrov V.G., Makhnev A.V., Nelaeva A.A. Tactics of diagnosis and treatment of thyroid nodules. Problems of endocrinology. 2002. V. 48, No. 5 pp. 3-6.
- 2. Gorbachyova T.A., Petrov V.G., YasnovV.Yu. Features of anesthesia and complications in the surgical treatment of thyroid pathology // Tyumen Medical Journal. 2004. No.3-4. pp.53-56.
- 3. Petrov V.G. The value of the size and growth rate of nodular thyroid gland formation in the prognosis of its belonging to oncopathology // Bulletin of the Tyumen University. 2006. No.5. pp. 154-159.
- 4. Petrov V.G., Malinin D.I. Perfection of the technique of extrafascialhemithyroidectomy // Siberian Medical Journal. 2007. No.2. pp. 98-102.
- 5. Petrov V.G., Malinin D.I. Long-term results of surgical treatment of nodular goiter // Siberian Medical Journal. 2007. No.4 pp. 98-102.

# PHARMACOECONOMIC EVALUATION BASED ON META-ANALYSIS OF DOMESTIC AND IMPORTED CEFUROXIME SODIUM FOR BACTERIAL INFECTION

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Objective: To assess the efficiency and safety of the domestic and imported cefuroxime sodium for bacterial infection, and then compare pharmacoeconomic evaluation of the two.

Methods: Collecting all clinical trials by retrieving Chinese Journal Full-text Database CNKI and Wanfang database on experiment of domestic and imported cefuroxime sodium in the treatment of bacterial infection, which are published during 2000 and 2010. The keywords are 'Domestic cefuroxime sodium', 'imported cefuroxime sodium' and 'bacterial infection'. The matching degree is fuzzy, then it appeared 48 papers. After choosing by person, there are 17 papers on domestic and imported cefuroxime sodium in the treatment of bacterial infection, in which, 11 articles met the inclusion criteria. All selected papers were randomized trial research. The papers about domestic and imported cefuroxime sodium in the treatment of bacterial infection, which are in accordance with inclusion criteria perform Meta analysis. And then take the total effective rate, bacterial eradication rates, adverse effect rates as an indicator to make pharmacoeconomic evaluation with the least cost method.

Results: A total of 11 RCTs and 873 patients were enrolled. The effective rate of domestic cefuroxime sodium and imported one is [OR 1.03, 95%CI (0.66, 1.61), P 0.90], the bacterial eradication rates is [OR 0.78, 95%CI (0.44, 1.40), P 0.40] and the adverse effect rates is [OR 0.95, 95%CI (0.58, 1.54), P 0.83]. The minimum cost method shows that the imported cefuroxime sodium costs higher.

Conclusion: The currently available evidence shows that there are no significant difference of

the total effective rate, bacterial eradication rates and adverse effect rates between the domestic cefuroxime sodium and the imported one. And the economic value of domestic cefuroxime sodium is higher.

#### [Reference]

- [1] Ochoa C, Eiros J M, Inglada L, et a1. Assessment of antibiotic prescription in acute respiratory infections in adult[J]. J Infect, 2000, 41(1): 73.
- [2] Verheagan J, VerbistL. In-vitro activityof 21 beta-la-ctam antibiotics against penicillin-susceptible and penicillin resistant Streptococcus pneumoniae[J]. J Antimicrob Chemother, 1998, 41(3): 381.
- [3] Scott L J, Ormrod D, Goa K J. Cefuroxime axetil: An updated review of its use in the management of bacterialinfections[J]. Drugs, 2001, 61(10): 1455.
- [4] He Ping, Zhng Xuezhen, Zhang Yujie, et al. The Clinical Research on Domestic and Imported Cefotaxime Sodium in the Treat-

ment of Bacterial Infection in Pregnancy[J]. Chin J Clin Pharmacol. 2004, 20(2): 83-87.

- [5] Liu Guohui, Yao Ying, Xiong Shengdao, et al. Curative Effect Comparison of Cefotaxime Sodium in the treatment of Bacterial Infection[J]. Herald of Medicine, 2001, 20(11): 691-692.
- [6] Zhang Ruixia, Cao Ehong, Xia Yirong, et al. The Comparative Research of Curative Effect of Domestic and Imported Cefotaxime Sodium in the treatment of RTI[J]. Journal of North China Coal Medical College. 1999, 1(6): 510-511.
- [7] Chen Zhuochang, Deng Baojun. The Comparison of Cost and Effect of Domestic and Imported Cefotaxime Sodium in the Treatment of Acute Bacterial Infections[J]. Chin J Clin Pharmacol. 2004, 20(6): 465-467.
- [8] Yang Qian, Zheng Jingchuan, He Jianqin, et al. The Clinical Curative Effect Observation of Domestic Cefotaxime Sodium for Injection in the Treatment of RTI[J]. Chinese Journal of Antibiotics, 2001, 26(5): 368-370.
- [9] Hou Fang, Li Jiatai, Gao Lei, et al. The Clinical Assessment to Domestic and Imported Cefotaxime Sodium in the Randomized Comparative Treatment of Acute Bacterial Infections[J]. Chinese Journal of Antibiotics, 2002, 27(7): 413-418.
- [10] Cai Yongning, Liang Derong, Xu Nan, et al. The Randomized Comparative Clinical Research with multi-center on Cefotaxime Sodium in the treatment of Acute Bacterial Infections [J]. Chinese Journal of Antibiotics, 2002, 27(5): 287-292.
- [11] Li Jianguo, Chen Rui, Li Hongyu, et al. The Clinical Assessment of Domestic Cefotaxime Sodium in the treatment of Bacterial Lower Respiratory Infection[J]. J China Pharm, 2004, 15(12): 746-748.
- [12] Liu Yuejian, Yu Yunzhi, Li Xiaohui, et al. The Clinical Research on Cefotaxime Sodium for Injection[J]. Chinese Journal of Antibiotics, 2002, 27(12): 734-737.
- [13] Tang Chunying, Zhang Kouxing, Lou Tanqi, et al. Bioequivalence Study of Cefotaxime Sodium for Injection[J]. Chinese Journal of Nosocomiology, 2004, 18(4): 847-849.
- [14] Chen Fei. The Analysis of Cost and Effect of Domestic and Imported Cefotaxime Sodium in the Treatment of Lower Respiratory Infection[J]. Modern Medicine and Health, 2007, 23(8): 1134-1135.

# THE DISCUSSION ON ALLERGIC SHOCK DURING PERIOPERATIVE PERIOD CAUSED BY CEFUROXIME

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The purpose of this paper is to probe into the characteristic and regularities of allergic shock caused by Cefuroxime and discuss the relativity between the drug and Patients under anaesthetic and anesthetics combination.

The method of this paper is to retrieve all the documents about Allergic shock caused by Cefuroxime from China National Academic Magazine Data-base (CNKI), Wan-fang database and Pubmed database. The matching degree is fuzzy with 'cefuroxime' and 'allergic shock' in Chinese as key words. Taking 'cefuroxime' and 'allergic shock/anaphylactic shock/shock anaphylacticus' in English as key words, there are 29 documents, including 25 in Chinese and 4 in English. With another 4 documents collected from clinic experience, there are totally 34 documents to be taken statistical analysis.

In total, there are 29 documents met the inclusion criteria. In 34 of the patients, 63.4% appeared the symptom in 30 minutes after medication. 6 of them are delayed type. 12 patients had the allergic shock during perioperative period, among them, 6 patients shocked after medical anesthesia, 10 patients got negative cefuroxime skin test.

In conclusion, it is difficult to prognosis the allergic shock caused by cefuroxime, which is apparently related with allergic physique. Side chain structure is the main antigenic determinant of allergic shock caused by cefuroxime. It will also increase the risk with the application of the combined anesthetics during perioperative period.

# [Reference]

- [1] Barry P. Adoption of intracameral antibiotic prophylaxis of endophthalmitis following cataract surgery: update on the ESCRS Endophthalmitis Study. J Cataract Refract Surg, 2014, 40(1):138-42.
- [2] Abi Khalil M, Damak H, Déc osterd D. Anaphylaxis and anaphylactic shock. Rev Med Suisse, 2014, 10(438):1511-5.
- [3] Elad Moisseiev, Eliya Levinger. Anaphylactic reaction following intracameral cefuroxime injection during cataract surgery. J Cataract Refract Surg, 2013, 39(9):1432-4.
- [4] Dylan parry prosser, M ark gompels. Anaphylactic shock due to cefuroxime in a patient taking penicillin prophylaxis. Paediatr Anaesth, 2002, 12(1):73-5.
- [5] Villada JR, Vicente U, Javaloy J, et al. Severe anaphylactic reaction after intracameral antibiotic administration during cataract surgery. J Cataract Refract Surg, 2005, 31(3):620-1.
- [6] Sáenz de San Pedro B1, Mayorga C, Torres MJ, et al. Boosted IgE response after anaphylaxis reaction to cefuroxime with Амурский медицинский журнал №3 (19) 2017