A NOVEL APPROACH FOR ESTIMATING RESOURCE UTILIZATION IN PATIENTS WITH SUSPECTED IMMUNE-MEDIATED COAGULOPATHY ASSOCIATED WITH EXPOSURE TO TOPICAL BOVINE THROMBIN

Coagulopathy can be caused by a variety of factors, such as medications, infections, or immune-mediated processes. In this study, the authors used an approach to estimate the economic burden and resource utilization in patients exposed to bovine thrombin.

RESULTS: A total of 450 patients exposed to bovine thrombin met the defined criteria for suspected coagulopathy during their index hospitalization. Five of these patients had suspected coagulopathy during a subsequent hospitalization. The estimated total cost [median (range)] was $247-$250,718, and blood bank $3,019 ($15-$264,943). Total hospital LOS was $1,368,706, including costs in pharmacy $7,404 ($237-$990,267), laboratory $6,098 ($247-$250,718), and blood bank $3,019 ($15-$264,943). Total hospital LOS was 21 days (1–1,027), with a median ICU LOS of 13 days (2–161). Costs were adjusted to 2009 dollars.

CONCLUSIONS: The approach used in this study may be useful in quantifying the costs associated with immune-mediated coagulopathies.

ADVERSE DRUG REACTIONS OF 33 VARIETIES OF TRADITIONAL CHINESE MEDICINE INJECTIONS ON THE NATIONAL ESSENTIAL MEDICINES LIST (2004 EDITION) OF CHINA: AN OVERVIEW ON PUBLISHED LITERATURES

OBJECTIVES: We conducted a literature review on the adverse drug reaction(ADR) of 33 variety of traditional Chinese medicine injections (TCMIs) on the National essential medicines list (2004 edition). METHODS: We electronically searched three major Chinese Databases(CBM, CNKI, VIP) since their inception to end-April, 2009. We also retrieved the websites of Ministry of Health and State Food and Drug Administration as well as Newsletter of Chinese Adverse Drug Reactions (issue 1 to 22). We descriptively analyzed the TCMIs ADR literatures. RESULTS: Among 5405 citations searched, only 1010 studies met the eligible criteria. The total and cumulative amounts of included articles about TCMIs ADRs significantly increase over time. The included 1010 articles were scattered among 379 periodicals, including 53 journals on pharmacoeconomic evaluation (containing 399 articles, accounted for 39.50%) and 64 journals on traditional Chinese medicine (containing only 197 articles, accounted for 19.50%). The articles included were categorized into eight types of design such as 348 case reports and 254 case series which accounted for 34.46% and 25.15% of the total articles, 119 overview (11.78%), 116 randomized controlled trials (11.49%), 78 cross-sectional studies (7.72%), 61 ADR literature analyses (6.04%), and 28 non-randomized controlled clinical studies (2.77%). The reports of ADRs to Shuanghuanglilan, Qingkailing and Yuxingcao injections were the most in all reports for TCMIs (more than 200 articles for each inclusions, accounting for 41.95% of the total). Four kinds of TCMIs (Shuanghuanglilan, Ciwujia, Yuxingcao, Yinzhihuang injections) among the top 5 reported ADRs literatures were removed for the market. CONCLUSIONS: Articles published on TCMIs ADRs increased year by year, but the research is of low quality and is scattered in a large number of sources. Four TCMIs (Shuanghuanglilan, Ciwujia, Yuxingcao, and Yinzhihuang) among the top 5 ADR literatures reported were terminated for sale and use. It is necessary to enforce safety re-evaluation of TCMIs and to promote the clinical rational use.

MENTAL HEALTH – Clinical Outcomes Studies

SIDE EFFECTS ASSOCIATED WITH PRESCRIPTION OF METHYLPHENIDATE IN TAIWAN

OBJECTIVES: Attention-deficit/hyperactivity disorder (ADHD) is a common mental illness of childhood, and the methylphenidate (MPH) is the most used and effective drugs in treating ADHD. Some recent studies found long-term use of MPH could cause side effects (SE) such as cardiovascular disease, mental illness, and substance abuse. This study focused on the pharmacological treatment of ADHD using MPH, and to evaluate the relationship between MPH and potential SE specifically on above three diseases. METHODS: The data source was the overall ADHD patients’ cohort during 2000-2007 from a population-based dataset, the National Health Insurance Research Database, in Taiwan. Children (aged 6–18) having newly diagnosed ADHD was included from claims data between January 1, 2001 and December 31, 2006. Newly diagnosed patient was identified as no diagnosed record before 12 months since initial ADHD diagnosed and data on SE were collected during the 12 months after each patient’s initial ADHD diagnosed. These patients were divided into two groups according to whether they were using MPH or not. RESULTS: We captured 61,878 new diagnosed cases (27,656 cases in MPH group, 34,222 in non-MPH group) during the study period. The Cox proportional hazards model analysis demonstrated that the risk of developing SE after MPH use was significantly higher in MPH group than in non-MPH group (HR = 1.77 and 1.80 respectively). CONCLUSIONS: Taking methylphenidate to treat ADHD did not increase HR of cardiovascular disease and substance abuse, but may have potential side effect of some mental illness such as oppositional defiant disorder and anxiety disorders.