

뇌신경재활

게시일시 및 장소 : 10 월 18 일(금) 13:15-18:00 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 15:45-16:30 Room G(3F)

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A Study of Operational Definition of Cerebral Hemorrhage Based on Health Insurance Claim Data

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Objective

In 2014, the National Health Insurance Corporation released sample cohort data that included 1 million randomly selected individuals, 2% of the total population, for the purpose of constructing research data. However, since the data of the National Health Insurance Corporation is collected for the purpose of requesting medical expenses, diseases not classified as a billing code are classified as 'unspecified', and inaccurate research can be performed using the data. To overcome these limitations, operational definitions of each disease need to be utilized, thereby reducing limitations such as overestimation or underestimation that may occur in using the data. The purpose of this study is to provide several operational definitions for the occurrence of cerebral hemorrhage and to provide information for accurate research by comparing the results with those of existing literature and finding the most similar results.

Methods

In order to identify the current status of patients with cerebral hemorrhage, the incidence per 100,000 people was calculated based on the number of patients with cerebral hemorrhage and the population from 2006 to 2015. In this study, the classification of patients with cerebral hemorrhage was defined based on ICD-10 (International Classification of Diseases, 10th Revision) coding, and the diagnoses corresponding to cerebral hemorrhage were identified as I60, I61, I62.

Results

Basically, there were seven candidates (primary disease/secondary disease, primary disease, primary disease/secondary disease + admission, primary disease + (ER visit + admission within 7 days), primary disease/secondary disease + (CT or MRI findings), primary disease/secondary disease + admission + (CT or MRI findings), primary disease/secondary disease + (admission or ER visit) + (CT or MRI findings)) for operational definition. According to various literature, the incidence of cerebral hemorrhage is not a significant decrease pattern. Therefore 'primary disease/secondary disease + admission'

or 'primary disease/secondary disease + (admission or ER visit) + (CT or MRI findings)' seems to be most stable definition criteria.

Conclusion

Operative definition is necessary to supplement the 'disease diagnosis' which is attributed to each patient, because it may be somewhat inaccurate in understanding the trend of actual disease. In this study, we found that 'primary disease / secondary disease + admission' or 'primary disease / secondary disease + (admission or ER visit) + CT or MRI findings' were the most stable definition criteria.

Table1 . Incidence rate of cerebral hemorrhage patients by definition criteria (per 100,000 people)

Definition Criteria	Year									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Primary disease /secondary disease	112.2	120.6	134.2	115.3	117.1	118.6	115.0	108.1	111.3	117.4
Primary disease	77.6	87.5	83.8	69.6	70.6	65.4	67.6	60.8	58.4	62.0
Primary disease /secondary disease + admission	55.9	68.4	77.9	68.2	69.9	67.9	70.9	67.2	66.7	71.8
Primary disease + (ER visit + admission within 7 days)	29.7	39.9	42.4	36.5	40.5	36.5	37.5	35.6	36.5	41.6
Primary disease /secondary disease + (CT or MRI findings)	86.1	98.7	108.7	98.4	99.5	101.9	98.2	92.0	96.5	101.1
Primary disease /secondary disease + admission + (CT or MRI findings)	48.7	58.6	66.1	60.1	62.5	60.7	62.3	58.4	60.3	63.6
Primary disease /secondary disease + (admission or ER visit) + (CT or MRI findings)	59.3	75.0	83.2	75.9	77.2	79.0	80.6	74.2	80.5	83.2

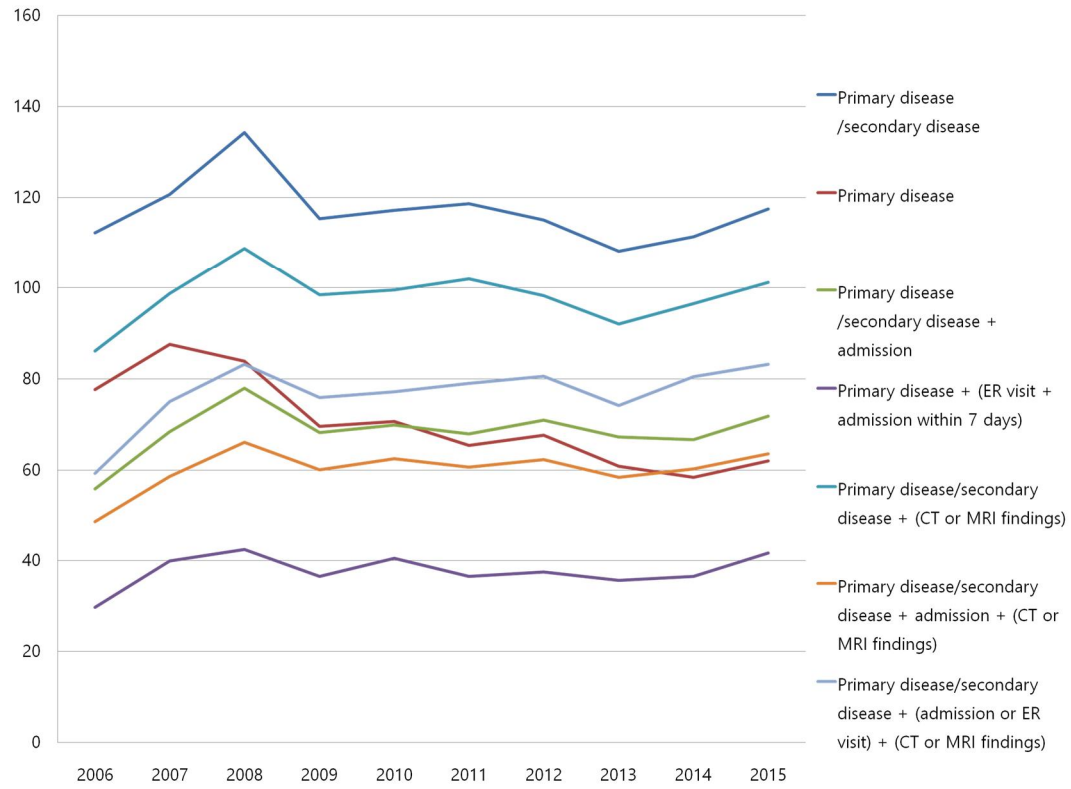


Figure1. Incidence trend of patients with cerebral hemorrhage