



Review Article

Interventricular Colliodal Cyst: A Literature Review

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Abstract

Colloid cysts do account for 0.5-1% of the entire brain mass. They are typical third ventricle lesions that are found on the interior end of the brain within the ventricle. When the colloid cyst affects the ventricle of the brain, it is termed as the intraventricular colloid cysts. The patient of the condition does experience headaches, which are secondary to the persistent or in other cases, intermittent obstructions of the foramen monro of the brain. The obstruction of the disorder in acute hydrocephalus has been termed as the resultant cause of the sudden death among the patients. In most cases, the cell of origin is still a subject of debate; however, studies have found out that it has the endodermal background. According to the findings of this study, the colloid cyst usually presents its clinical signs and symptom among adults between the age of 40 and above. It is considered rare among people below the ages of 30, and for a patient, they do form fluctuating or in other cases, a progressive form of dementia. It, however, very lethal if not detected in a timely manner.

Keywords: Colloid cysts; Foramen moron; Hydrocephalus

Introduction

Intraventricular Colloid Cysts (ICC) is a gelatinous tumor matter that is, in rare cases, found in the brain [1,2]. It is almost found just on the posterior end of the foramen of monro in the anterior element of the third ventricle of the brain that originates from the roof of the ventricle [3]. Due to the fact that it is located on the posterior end of the brain, it usually causes obstructive hydrocephalus and increased pressed of the intracranial areas [4]. The colloid cysts do present more than 0.5% of the tumor of the intracranial [5]. ICC comprises of a

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rather large septum of the different pathological forms and conditions [6]. The treatment of the disorders is warranted in most instances unless there exists a progressive way of the ventricular obstructions with the hydrophilic or growth of the lesion itself, making tissue biopsy and histopathologic diagnosis necessary [7]. Treatment of the ICC includes observations of relatively smaller and asymptotic kinds of wound or in other cases, surgical management with the microsurgical or neuro-endoscopic resection [8].

Method

The study did examine the various case studies from the different articles and health journals on the Intraventricular colloid cysts [9]. The study mainly discusses the case of 80 patients who suffered the ICC condition intending to determine the prevalence rate and age of the victim [10]. Besides, this survey did examine an example of a single woman at the age of 33 years with intraventricular colloid cysts who developed the hydrocephalus, cardinal signs and survived [11].

Results

Intraventricular colloid cysts account for approximately 2% of the primary tumor of the brains [12]. This form of a cyst, which results in the growth of brain tumors, is particularly common among people between the ages of the 40s and 50s [13]. Research has found that about 80% of the patient who has suffered from the intraventricular colloid cysts reported was between the age of 30 and 60. Meaning that the diseases are mostly for the person at the later generations in life [14]. The study did find out that the individual patient was a person above the age of 40 years, only 4 out of the 80 patients considered by the journal that was reviewed were below the age of 30 years [15]. In the case of the single patient, the patient had decreased left ventricular ejection fraction, apex sparing areas of the hypokinesia, and the oakiness [16].

Discussion

Pathophysiology of intraventricular colloidal cyst

The form most patients of ICC, the various symptoms that do appear varies depending on the individual patient. For most patients, the sign may include headaches, vertigos memory loses, and another form of behavioral disturbances [17]. However, in extreme cases of the condition, the patient usually has a sudden death [18]. The intermittency of symptoms is generally characterized by lesion and higher pressure of the brain. The ICC has been over time linked to the four primary variables, including the cyst size, cysts imaging characteristics age of the patient, and the size of the ventricle. However, the clears development of the condition has not to be established [19].

Biochemistry of intraventricular colloidal cyst

The impact or the extent of occurrence of this disorder cannot easily be estimated. However, various methods of measuring the prevalence of the ICC have been conducted on the basis of the age

and other elements such as the location and gender. The incidence is, however, higher among individuals above the age of 40 years.

Genetics of intraventricular colloidal cyst

There is little information that links the ICC to any familial history of the patient. As such much of the genetic mechanism of the development of the condition is not known. Other cases may represent a potential association between the familial case and the congenital hernia. It is a factor of the disease that is mentioned above other than genetics.

The clinical implication of colloidal cyst

Patients with the interventricular colloid cyst ICC do become asymptomatic when the tumor enlarges all over sudden and resulting in the obstruction of the cerebrospinal fluid as well as the intracranial pressure on the patient [20]. Some of the colloid cysts do expand more gradually, and even though they can allow the patients to accommodate the enlarging mass without disruption, the obstruction of the cerebrospinal fluid flow and the patient of the ICC would remain asymptomatic [21]. In such instances, in case the cysts stop growing, the patient of such conditions can remain steady for some time between the CFS production and the absorption that might not necessarily need a neurological treatment or intervention [22].

Scientific analysis of intraventricular colloidal cyst

The two health journal which was considered for the study included Kuroiwa et al., and Souweidane et al., Both the journal were very informative on the various aspect of the Intraventricular colloid cyst disorder. Each of the journals explained the distinct element of the disease in a manner that I clearly understood [23]. However, the first article was very elaborate, and besides, told the actual component of the condition; it gave various case studies, which made it quite easy to understand. The second journal did not have much elaboration and made its realization quite limited.

Unanswered questions

The major question which remains unanswered on the ICC is on the question as to why does the condition affects people above the ages of 40 years the most. Since the diseases have little in relation to the age, factor the prevalence in age is seen to be higher among people above the ages of 40 years. This remains under study and as much a mystery.

Conclusion and Future Perspectives

Intraventricular colloid cyst a condition of the third ventricle that presents acute hydrocephalus due to the inter-cyst, and the interventricular hemorrhage is a condition of the brain, which is very rare yet very lethal. Studies, however, reveals that the disease mostly affects people above the ages of 40 years and mostly 50 years. The condition is scarce among a person of the ages 30 years and below [24]. Even though the state has not experienced much scientific recognition and research, there is a chance that it can be treated through endoscopic surgery when detected early enough. Endoscopic resection and be performed using the flexible form of video-scope to examine the patient's level of the colloid cyst on the brain of the patient [25]. Many scientific studies are however, still needed on the condition for better treatment.

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