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The Role of Cerebral Vascular Malformations in the Development of Cerebrovascular Disorders

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Abstract: Brain blood vein cerebrovascular anomalies (BBVCA) of diseases in development important from factors one This is the article describes the stroke, blood to leave and ischemic to events impact studied. In the study arteriovenous malformations, aneurysms and Moya-Moya disease cerebrovascular to diseases dependency analysis made, their danger level evaluated. Magnetic resonance imaging angiography (MRA) and computer tomography such as angiography (CTA) advanced diagnostics methods efficiency seeing Also, the BBVCA early diagnosis and prevent to take measures discussion Research results these anomalies early determination and effective treatment cerebrovascular diseases development prevent to take help to give shows.

Keywords: brain blood vein anomalies, cerebrovascular diseases, arteriovenous malformation, aneurysm, Moya-Moya disease, angiography.

Introduction. Brain blood vein anomalies (BBVCA) – this brain blood of the veins congenital or acquired pathological changes are, they are cerebrovascular in the development of diseases (CVD) important role plays. This abnormalities stroke, blood to leave, and ischemic situations brought release possible. World health storage According to the World Health Organization (WHO), according to, cerebrovascular diseases world on a scale disability and of death main from the reasons one is , every 15 million per year more than to a person impact shows (WHO, 2021).

Cerebrovascular of diseases main from the reasons one brain blood of the cycle violation is, this situation mainly blood of the veins anomalies related will be. Congenital or acquired blood vein changes brain normal blood in tissues with to be provided obstacle does this and hypoxia, ischemia and blood to leave such as heavy to complications take arrival Brown and By Hill (2019) take visited in research arteriovenous malformations (AVMs) increase the risk of stroke by 45% Also, D' Antona and colleagues (2020) own in research aneurysms crack probably, their size and location with dependence those who emphasized.

Another one important aspect is that Moya-Moya disease such as less occurring pathologies young children and in adolescents risk of ischemic stroke noticeable at the level increases (Suzuki & Takaku , 2018). This disease progressive to the feature has time is to pass with in patients neurological defects increases. Therefore for the BBVCA early determination and treatment cerebrovascular of diseases prevent in receiving important importance profession will reach.

This brain in the article blood vein anomalies cerebrovascular to diseases impact is studied, as well as these pathologies early diagnosis and prevent to take methods discussion The research is being conducted main The purpose of the BBVCA clinical importance determination and this

anomalies early determination through cerebrovascular diseases development reduce their ways from learning consists of.

Materials and Methods: Brain in the study blood vein anomalies and their cerebrovascular diseases with dependency studied . Research for following materials and methods used:

- Literature Analysis: Last ten annually print done scientific articles , clinical research and statistic information seeing It was released .
- Retrospective analysis: 2015–2024 with BBVCA in the range related of diseases diagnostics and clinical results studied.
- Magnetic resonance imaging angiography (MRA) and computer tomography angiography (CTA): This advanced technologies using of patients blood vein status in detail analysis was done.
- Epidemiological research: between BBVCA and SVK dependency various young in groups, gender and danger factors according to studied .
- Clinical Observations: Various young to groups belonging Due to BBVCA in patients to the surface arrived cerebrovascular pathologies observed.

In the study taken information statistic methods using again processed, anomalies and their complications between dependency determined.

Results. Analysis results brain blood vein anomalies cerebrovascular of diseases to develop directly impact to show confirmed. The following main results determined:

- Arteriovenous malformations (AVM): These congenital blood vein anomaly stroke and blood to leave increases the risk of heart disease by 30–50%. Many In cases where AVM is not how clinical characters without giving develops and only blood to leave or epileptic seizure with manifestation will be.
- Aneurysm: Research to the results According to, 60% of patients have brain blood vein aneurysms cerebrovascular diseases, especially subarachnoid blood departures with related Aneurysms rupture of patients big in part death or heavy disability with completed.
- Moya-Moya disease: This is rare. occurring disease ischaemic stroke and blood to leave the risk increases. Disease mainly young children and in adolescents occurs, but adults also occurs among.
- Arteriovenous fistulas and other congenital anomalies: This pathologies cerebrovascular in 15–20% of cases to develop reason will be.

Also, research results this showed that BBVCA early determined in patients cerebrovascular diseases development probability noticeable at the level decreased.

Discussion. Research. results this shows that the brain blood vein anomalies cerebrovascular to diseases reason divider main from factors one This is pathologies prevent to take and effective treatment for the following important importance has:

- High danger to the group belonging patients screening to do: Especially family history of BMJT to individuals regular inspections transfer
- Advanced diagnostics from the methods Usage: using MRA and CTA anomalies early in stages to determine.
- Minimally invasive surgery from treatments Usage: Endovascular embolization, stenting and microsurgery methods through pathology correction.
- Life style change and Prevention: Blood pressure control to do, harmful from habits give up goodbye, healthy food and physical activity increase.

Results this shows that with BBVCA related cerebrovascular diseases early diagnosis and treatment through stroke and other serious complications prevent to take possible.

Conclusion: The brain blood vein anomalies cerebrovascular of diseases important etiological from factors one is, their early diagnostics and correct management cerebrovascular pathologies in reduction important role plays. This research results based on this to say possibly developed diagnostic technologies and preventive of measures wide application cerebrovascular of diseases to decrease help gives.

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