Research question: Language disorders: How does a brain hemorrhage affect language usage?

Structure outline:

1. **Introduction:**
2. Explanation: How does the brain understand and express language? (connection between brain and language 🡪 what happens when something goes wrong in our brain?)

Table of contents! 🡪 not just reading / repeating it!

1. **Brain bleed:**
2. What is a brain bleed? 🡪 a type of stroke.
	* What is a stroke?
		+ A life-threatening condition that happens when part of your brain doesn’t have enough blood flow.
	* How does a stroke affect your brain?
		+ The brain cells in that area start to die from a lack of oxygen.
	* What sort of strokes?
		+ Ischemic + hemorrhagic (focus on hemorrhagic stroke).
3. How do you get a brain hemorrhage?
	* + High blood pressure, aneurysm, head trauma, bleeding disorders, amyloid angiopathy, blood vessel abnormalities, brain tumors and liver disease.
4. What are the symptoms of a brain hemorrhage?
	* + Headache, nausea / vomiting, weakness, tingling or numbness (often on 1 side), dizziness, confusion, difficulty speaking or understanding speech, loss of movement.
5. What are the consequences of a brain hemorrhage?
	* + It can affect use of language.
6. **Language disorders:**
7. What is a language disorder?
* They are about trouble using and understanding spoken language.
1. What types of language disorders?
* Expressive language disorder
* Receptive language disorder
* Expressive-receptive language disorder
1. What kind of language disorder with brain hemorrhage?
* With brain hemorrhage 🡪 can get any type.
1. **Aphasia:**
2. What is aphasia?
* A disorder that affects how you communicate.
1. What types of aphasia?
	* Broca’s aphasia:
		+ Difficulty building sentences, language production is not fluent
			- Telegram style.
			- Tip of the tongue effect (TOT) 🡪 case report (statistics)
	* Wernicke aphasia:
* Fluent speech that does not make sense
* Use lot of verbs.
* Long sentences.
* In reality: no types, run through each other, just made to make distinction.
1. What type of aphasia with brain hemorrhage?
* Most of the time: Broca’s aphasia
* Rarely: Wernicke aphasia
1. When do you get a certain type of aphasia with brain hemorrhage?
* Depending on: location of bleeding.
* Depending on: size of bleeding.
1. **Conclusion:**
2. Brain hemorrhage can lead to the language disorder ‘aphasia’.

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