

Ocena neuropsychologiczna funkcji
językowych przed, w trakcie i po zabiegu
neurochirurgicznym u pacjentki z
glejakiem o niskim stopniu złośliwości

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III Konferencja Naukowa „Interdyscyplinarne spojrzenie na Nauki
o Zdrowiu” pamięci prof. dr. hab. n. med. Piotra Lassa

Gdynia, 28.09.2023

Historia pacjentki

Kobieta 38 lat, wykształcenie wyższe

2017 – pierwsza operacja

Rozpoznanie diffuse astrocytoma WHO II°

10/2022 – fMRI

03/2023 – druga operacja

Rozpoznanie astrocytoma WHO III°

05/2023 – Radioterapia

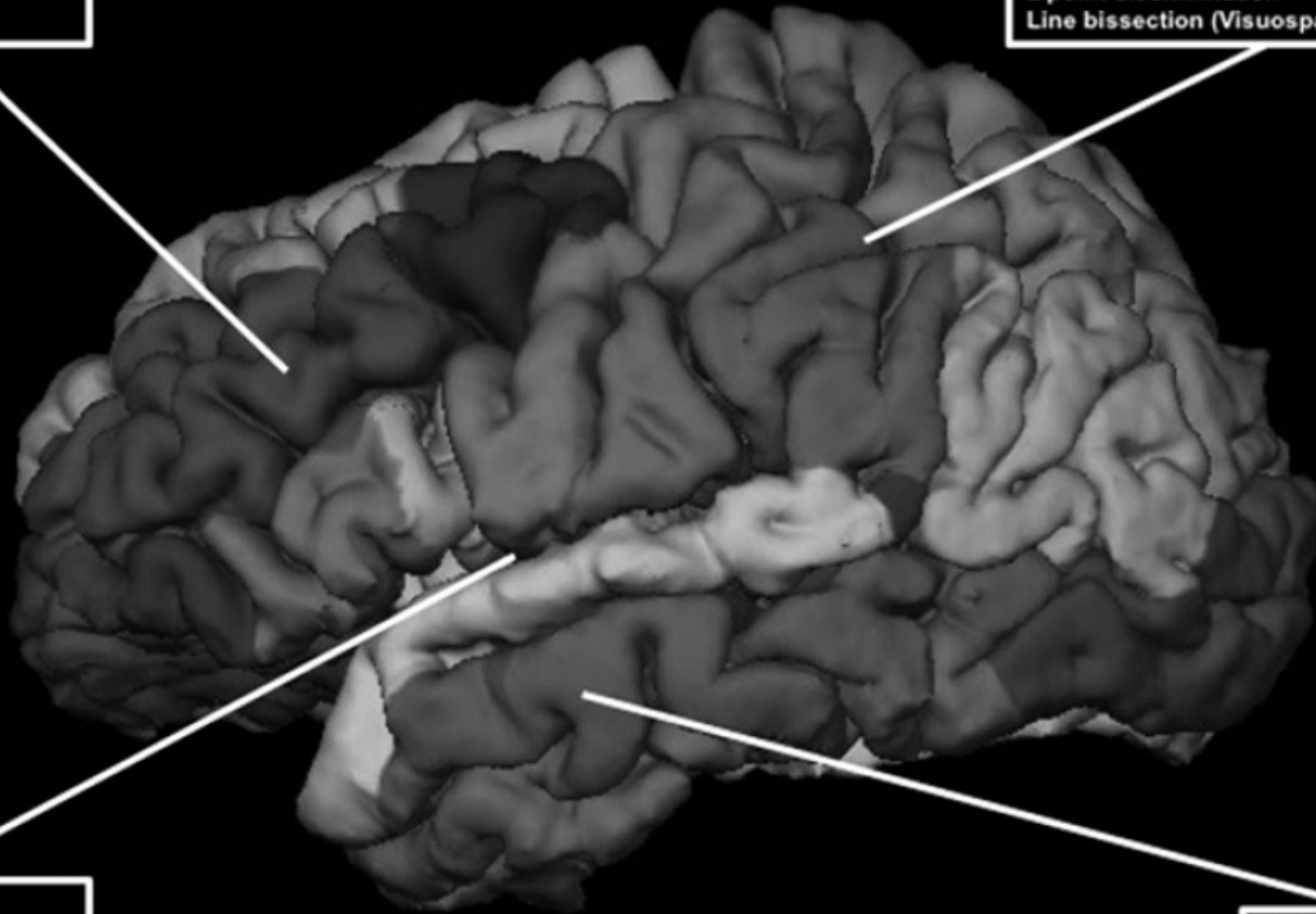
Trzecia operacja?

Frontal

Motor Function
Speech arrest
Picture Naming
Reading
Spelling

Parietal

Somatosensory function
Picture naming
Calculations (dominant)
2 point discrimination
Line bisection (Visuospatial function)



Insular

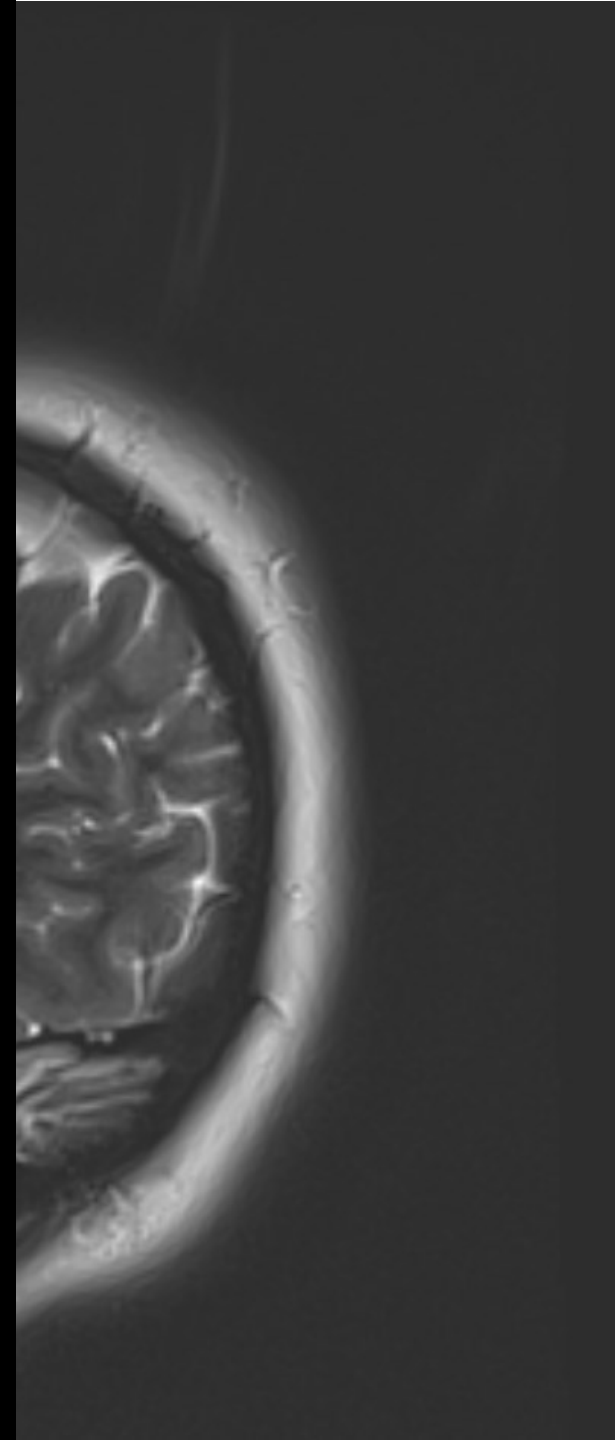
Motor Function
Speech arrest
Picture naming
Reading
Spelling

Temporal

Picture naming
Reading
Spelling



MRI przed drugą operacją



Badanie przesiewowe

- Wynik ogólny ACE-III 95/100
- Uwaga 17/18
- Pamięć 26/26
- Fluencja 11/14
- Język 25/26
- Funkcje wzrokowo-przestrzenne 16/16

ADDENBROOKE'S COGNITIVE EXAMINATION – ACE-III
English Version A (2012)

Name: _____ Date of testing: ____/____/____
Date of Birth: _____ Tester's name: _____
Hospital No. or Address: _____ Age at testing: Full-time education: _____
Occupation: _____
Handedness: _____

ATTENTION

➤ Ask: What is the Day Date Month Year Season Attention (Score 5/5)
No. Floor Street/Hospital Town County Country Attention (Score 5/5)

ATTENTION

➤ Tell: "I'm going to give you three words and I'd like you to repeat them after me: lemon, key and ball."
After subject repeats, say: "I'd like to remember from here because I'm going to ask you later."
➤ Score only the first trial (Repeat 3 times if necessary).
➤ Inquire: Number of trials: _____ Attention (Score 3/3)

ATTENTION

➤ Ask the subject: "Could you take 7 away from 100? I'd like you to keep taking 7 away from each new number until I tell you to stop."
➤ If subject makes a mistake, do not stop them. Let the subject carry on and check subsequent answers (e.g. 93, 84, 77, 70, 63 – score 4).
➤ Stop after five subtractions (84, 76, 70, 63, 56). Attention (Score 5/5)

MEMORY

➤ Ask: "Which 3 words did I ask you to repeat and remember?" Memory (Score 3/3)

FLUENCY

F - Letters

Say: "I'm going to give you a letter of the alphabet and I'd like you to generate as many words as you can beginning with that letter, but not names of people or places. For example, if I give you the letter 'C', you could give me words like 'cat, city, clock' and so on. But, you can't give me words like Catherine or Canada. Do you understand? Are you ready? You have one minute. The letter I want you to use is the letter 'r'."

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st	32nd	33rd	34th	35th	36th	37th	38th	39th	40th	41st	42nd	43rd	44th	45th	46th	47th	48th	49th	50th	51st	52nd	53rd	54th	55th	56th	57th	58th	59th	60th	61st	62nd	63rd	64th	65th	66th	67th	68th	69th	70th	71st	72nd	73rd	74th	75th	76th	77th	78th	79th	80th	81st	82nd	83rd	84th	85th	86th	87th	88th	89th	90th	91st	92nd	93rd	94th	95th	96th	97th	98th	99th	100th
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➤ **Animals**

Say: "How can you name as many animals as possible. It can begin with any letter." Fluency (Score 5/5)

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st	32nd	33rd	34th	35th	36th	37th	38th	39th	40th	41st	42nd	43rd	44th	45th	46th	47th	48th	49th	50th	51st	52nd	53rd	54th	55th	56th	57th	58th	59th	60th	61st	62nd	63rd	64th	65th	66th	67th	68th	69th	70th	71st	72nd	73rd	74th	75th	76th	77th	78th	79th	80th	81st	82nd	83rd	84th	85th	86th	87th	88th	89th	90th	91st	92nd	93rd	94th	95th	96th	97th	98th	99th	100th
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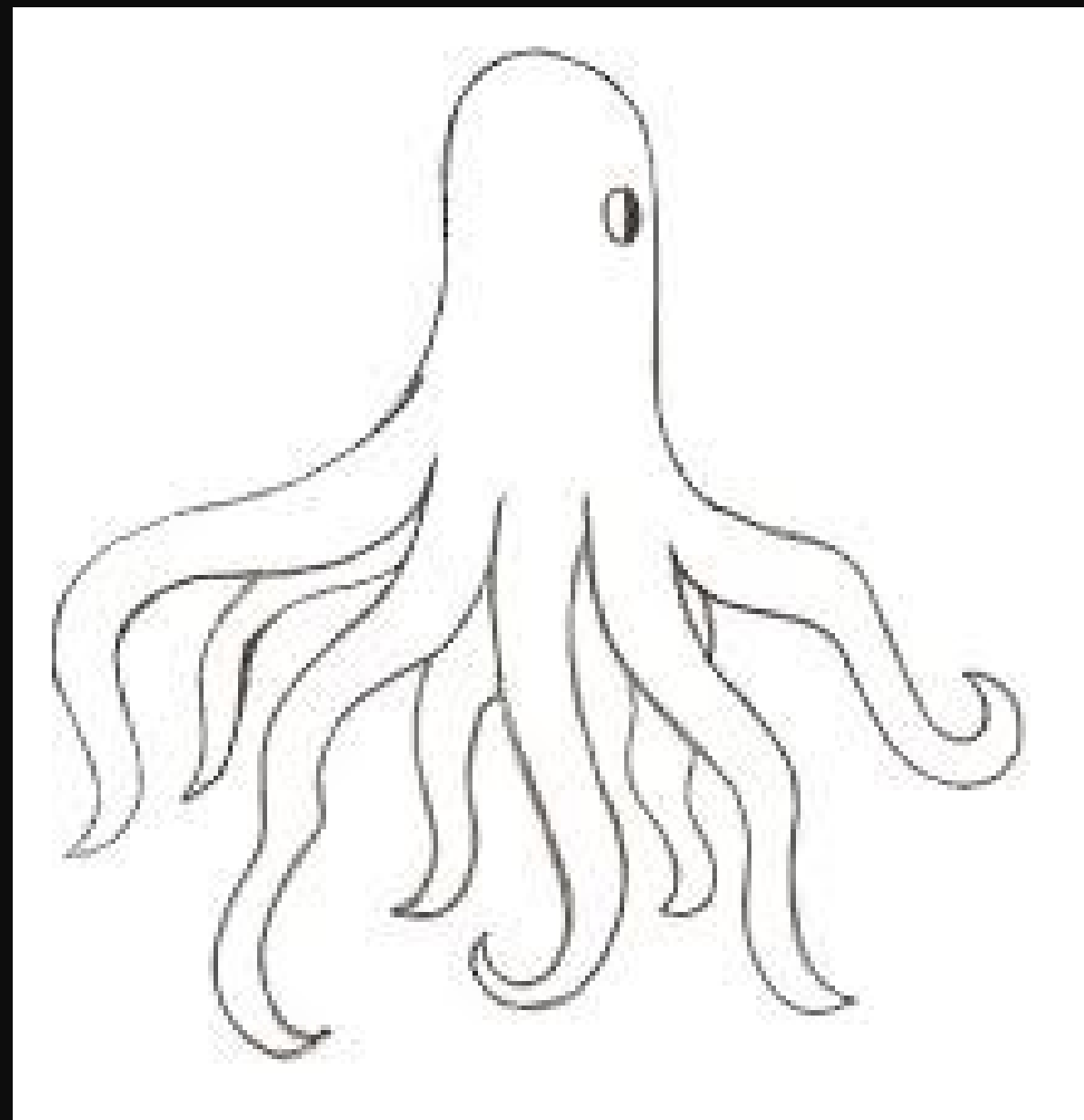
LANGUAGE

➤ Ask the subject to name the following pictures:

		
_____	_____	_____
		
_____	_____	_____
		
_____	_____	_____

Ocena funkcji językowych

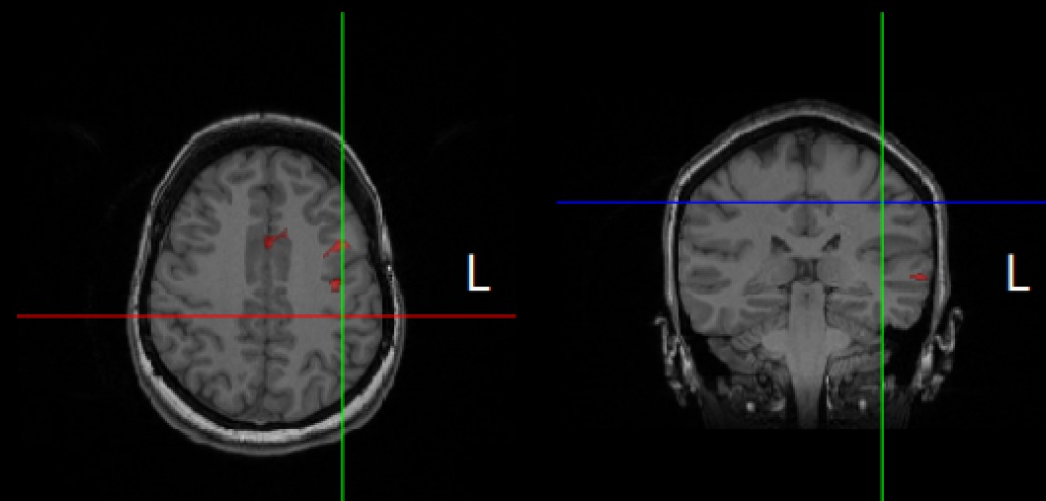
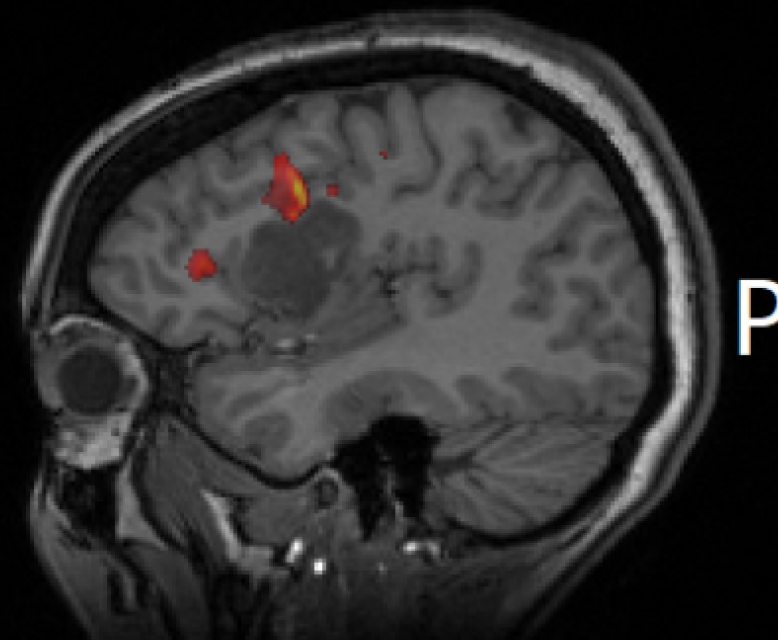
- Bostoński Test Diagnostyczny do Badania Afazji – bez zaburzeń
 - Bostoński Test Nazywania – 26/30 poprawnych
-



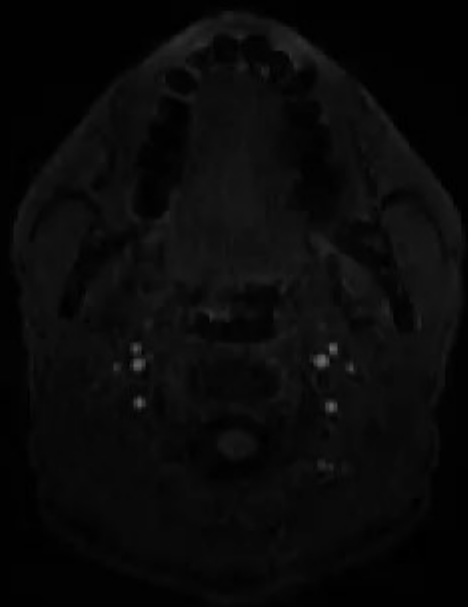
fMRI - protokół

- Ocena funkcji językowych – generowanie czasowników

14,83
5,785



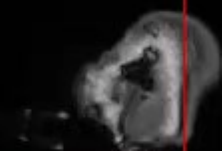
14,45
5,637



L



L

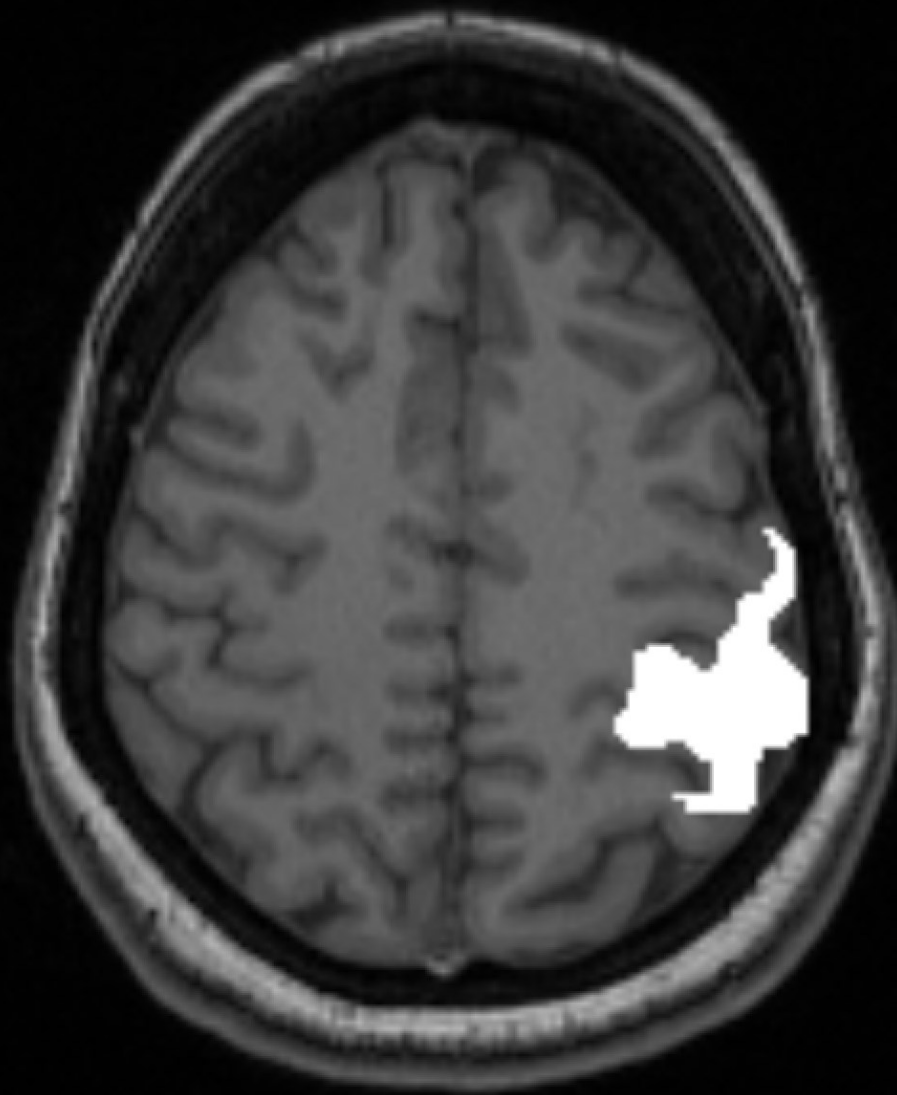


P

- Aktywność mózgu podczas generowania antonimów
-

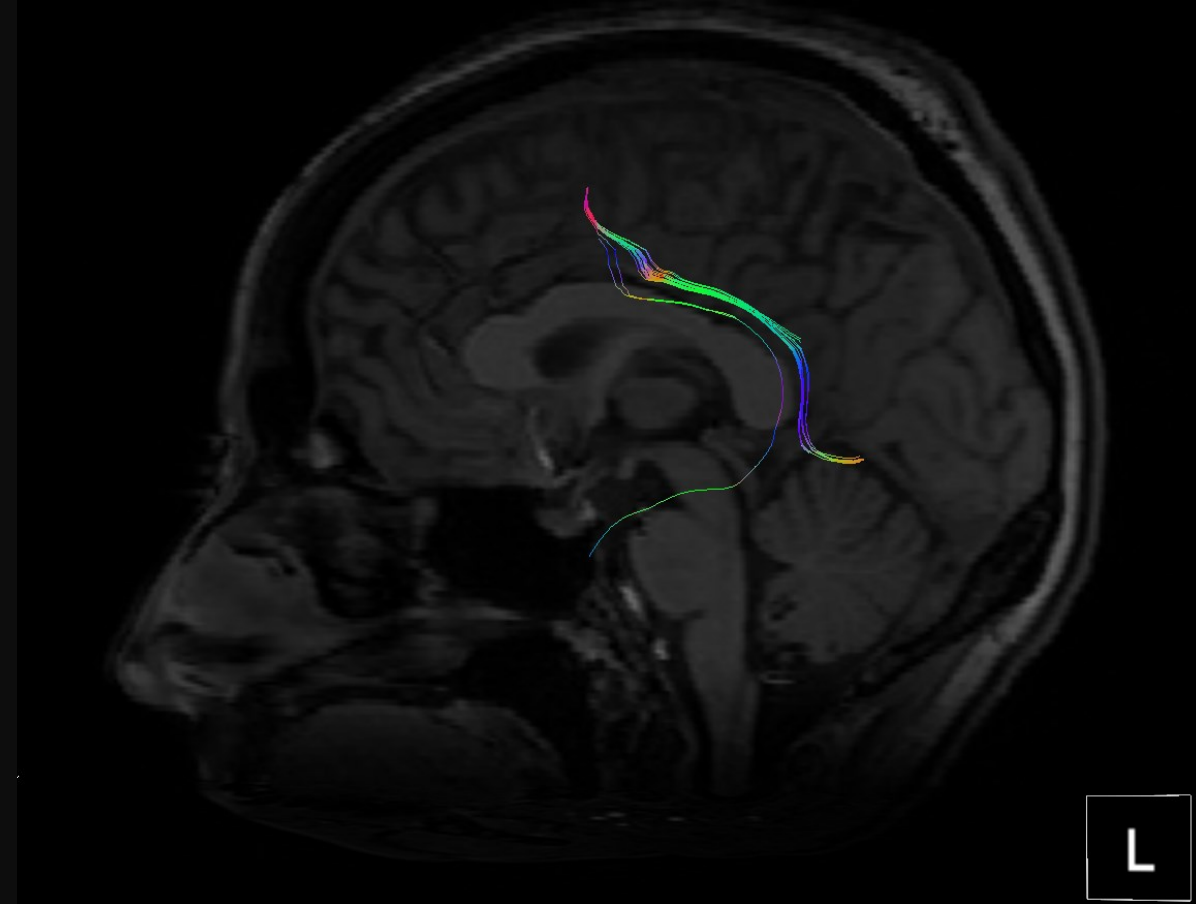
fMRI - protokół

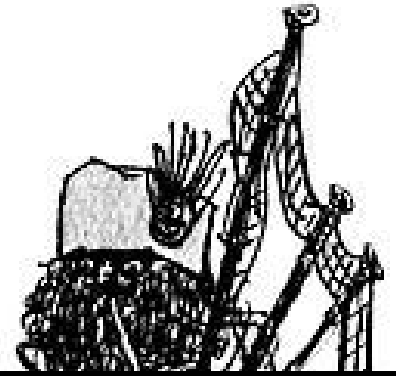
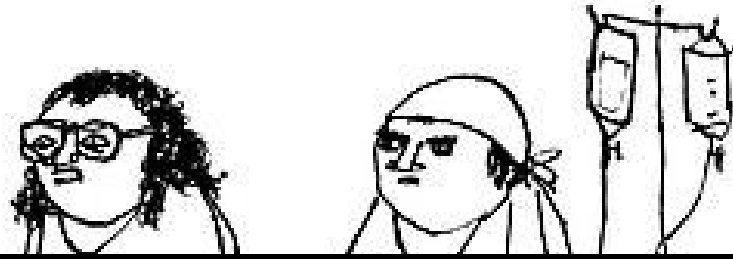
- Ruch prawą ręką



Traktografia

- Pęczek łukowaty łączący okolicę Broca i okolicę Wernickego





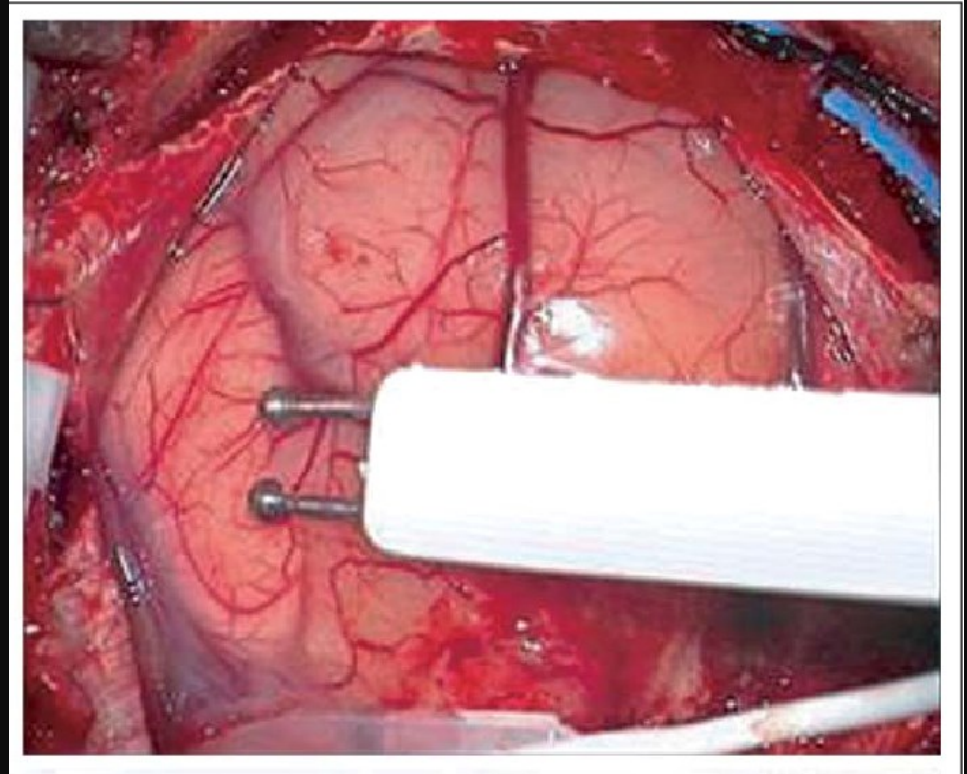
Operacja w wybudzeniu

STED

"You'll be kept awake throughout the operation."

Operacja w wybudzeniu

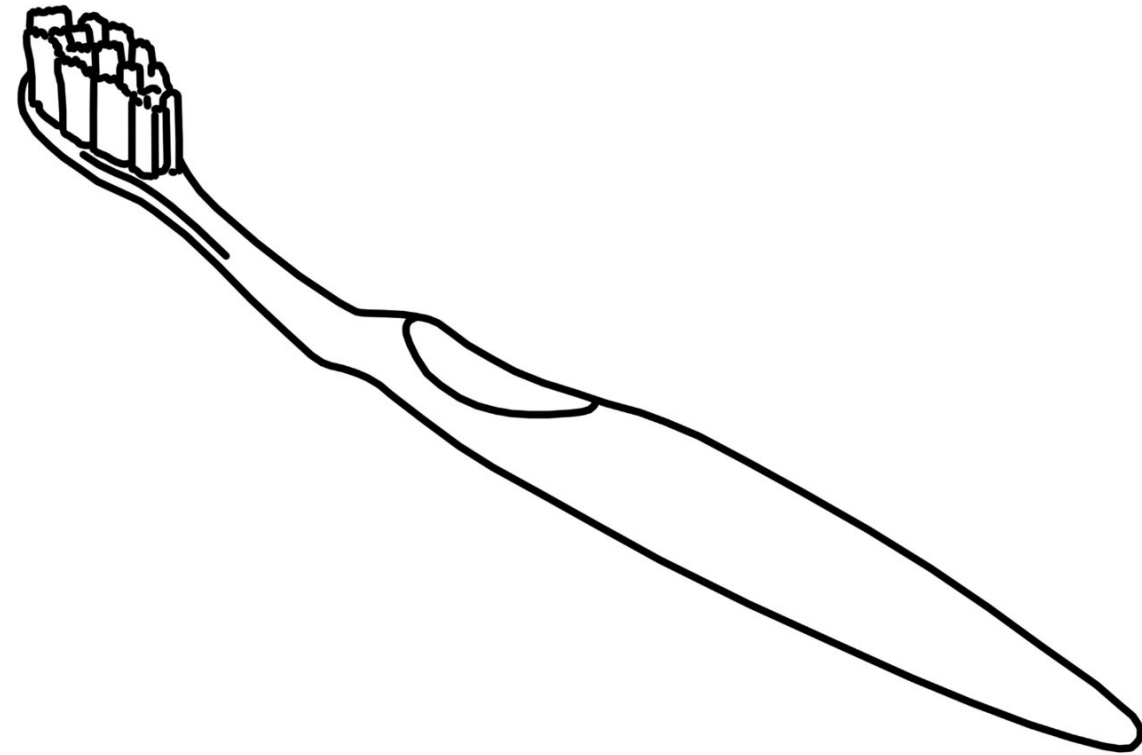
- W 03.2023 przeprowadzono operację w znieczuleniu miejscowym w protokole awake-awake-awake
 - Pacjentka uprzednio została przygotowana i oceniona przez neuropsychologa i anestezyjologa
-



Śródoperacyjna ocena funkcji językowych

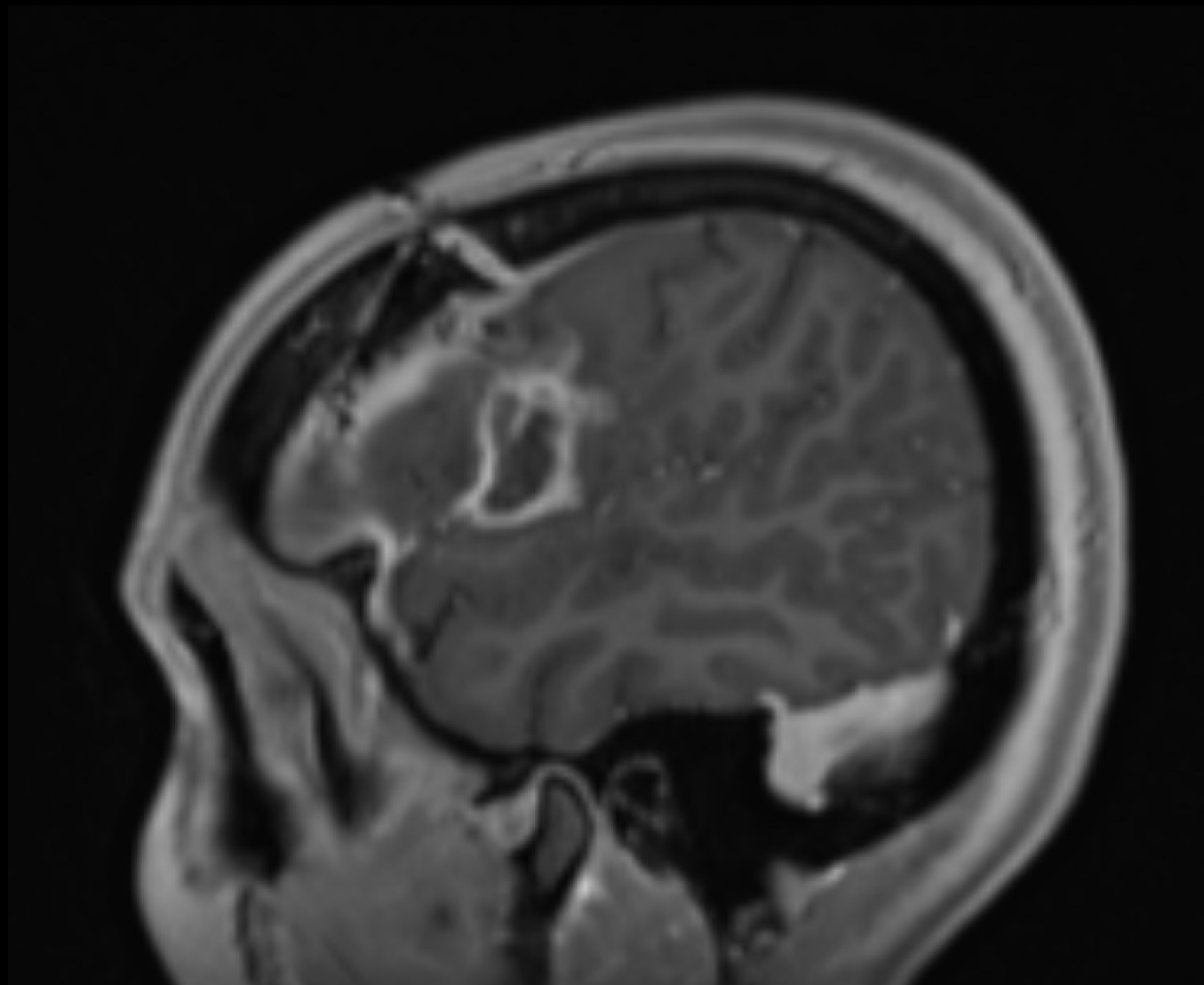
- Test nazywania – polskie opracowanie: dr Joanna Sierpowska i dr Agata Zdun-Ryżewska
-

TO JEST





MRI po operaciji



Ocena zaburzeń neuropsychologicznych po operacji

- Wynik ogólny ACE-III 92/100
- Uwaga 16/18
- Pamięć 25/26
- Fluencja 10/14
- Język 25/26
- Funkcje wzrokowo-przestrzenne 16/16
- BNT – 24/30
- BDAE – parafazje głoskowe w wyrazach zawierających głoski szeleszczące, łagodne trudności w aktualizacji słownika i przeszukiwania zasobów

Lekcje na przyszłość

- Praca zespołowa - neurochirurg, neuropsycholog, neuroonkolog
- Kompleksowa ocena poznawcza przed i po operacji
- fMRI i operacja w znieczuleniu miejscowym jako złoty standard leczenia guza mózgu w elokwentnych obszarach mózgu



Dziękuję za uwagę

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