Quiz
WHAT IS YOUR DIAGNOSIS?

A 12-year-old girl presented with 7 months history of seizures which occurred approximately 2 times per month. The physical examination was unremarkable but magnetic resonance (MR) imaging revealed non-enhancing, superficial mass in the right temporal lobe which measured 2.5 × 1.8 × 2.6cm (Fig. 1). The lesion was hypointense in T1 images, hyperintense in T2 and FLAIR images.

Intraoperative consultation specimen was obtained, and squash smear cytology was done. The smears were moderately cellular and consisted of monomorphic cells with fibrillary stroma. The cells were bipolar in shape and showed delicate, elongated projections (Fig. 2). There were quite numerous thin-walled vessels and tumor cells were radially oriented to some blood vessels (Fig. 3). Smears showed also single Rosenthal fibers (Fig. 4).

Surgical resection specimen showed grey tumor with brown, cystic area in the center. Histological sections showed glial tumor composed of uniform, bipolar cells with elongated nuclei. The cells showed angiocentric arrangements. Perpendicular orientation of tumor cells to the pia was also noted (Fig. 5). In the center of the tumor there were schwannoma-like areas with structures resembling Verocay bodies (Fig. 6). Mitotic activity, nuclear atypia or necrosis were not found.

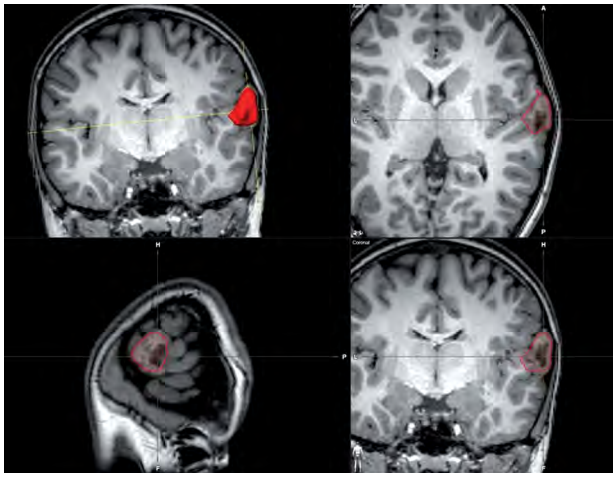

Fig. 1. MRI T1-weighted image showing the tumor located in the posterior part of the right superior temporal gyrus which had a volume of 3 cm^3 (red area). The tumor visualization was performed in the SmartBrush station program (Brainlab, Germany)

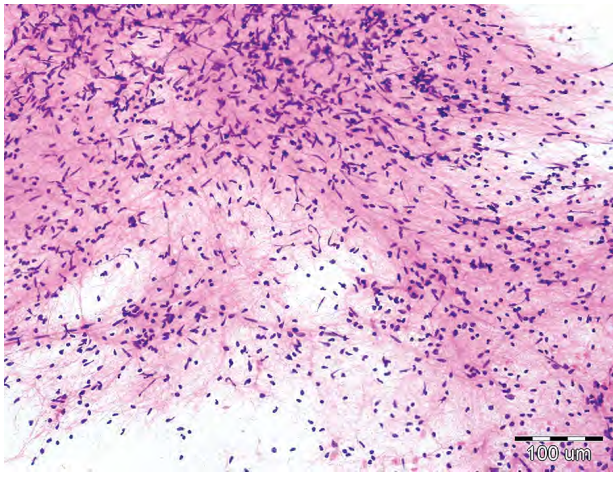

Fig. 2. Smear showing monomorphic neoplastic cells (HE; ×100)

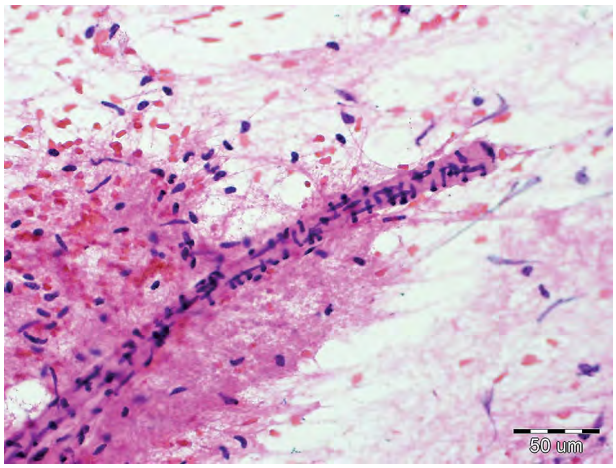

Fig. 3. Smear showing tumor cells with perpendicular alignments to blood vessel (HE; ×200)

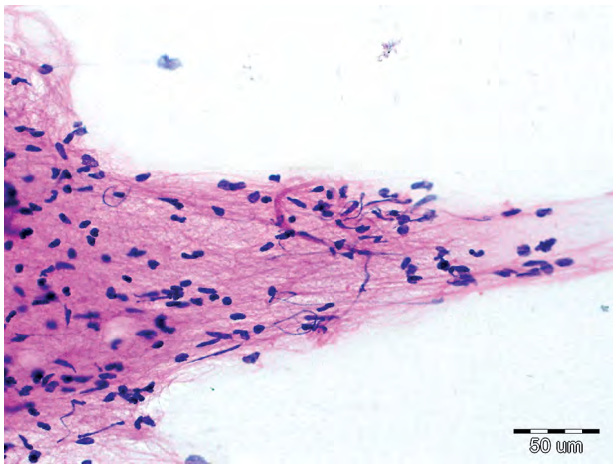

Fig. 4. Smear showing Rosenthal fiber (HE; ×200)

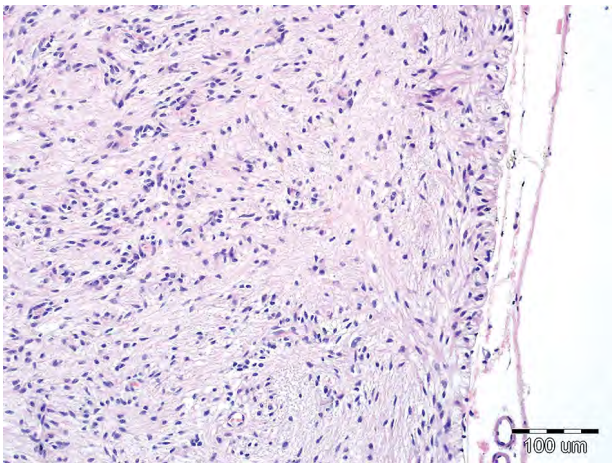

Fig. 5. Histological section showing population of monomorphic cells and its perpendicular orientation to the pia (HE; ×100)

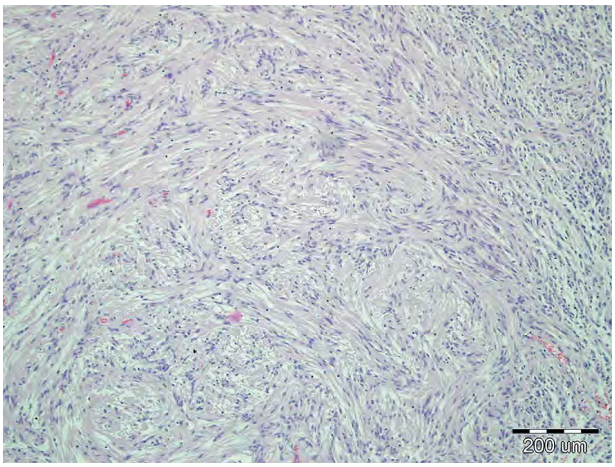

Fig. 6. Histological section showing Schwannoma-like area with structures resembling Verocay bodies (HE; ×40)

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Answers should be sent to the Editorial Office until 15th November 2020. The correct answer will be announced in the next issue of the *Polish Journal of Pathology*.