

The thread-protective cell, a new cell performing multiple tasks

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Our research work, which has led us to discovering the new cerebral cell, has started 30 years ago. An important moment was the year 1986, when we have highlighted it for the first time, during a study upon the clarification of some undiscovered aspects of cerebral atherosclerosis. In 2006 we have initiated the publishing of our results at three congresses (Cape Town - 2006; San Diego – 2009 and Los Angeles - 2011) as well as in three Atlases, form 2006, 2008 and 2010. By means of the electronic microscope we have analyzed to this purpose alone, a number of neurosurgery patients, with 1176 cerebral, vascular, tumoral, cortical, choroid plexus tumor and infectious biopsies. The cell in question was named cordocit-protectocit (thread-protective cell) in order to highlight its morphological aspect of a belt band and its functional one, of protective element of the noble substance of the brain, acting for its defense against various aggressions, especially hemorrhagic. On this occasion we have discovered that the pia mater is made up of such protective cells, which also play a role in preventing the neuroblasts from migrating. When the chemotactants of our cells are not numerous enough, subcortical cell heterotopias will occur, at the level of the corona radiata, double cortex and other neuronal migration disorders which may generate epilepsy. Therefore, the pia mater should be considered from a cytodynamic perspective. The telocyte at the internal organs level (intestine, heart etc.) is nothing else but the interstitial cell of Cajal (ICC), described by Cajal more than 100 years ago. The ICC spontaneously initiate rhythmic electrical activity, much like the peacemaker cells of the heart.

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