

Methodology for creating dissertation abstracts and keywords

The dissertation must include the so-called bibliographic identification, i.e. abstracts and keywords.

The abstract is an introductory brief text (excerpt), which presents the entire dissertation. It is a mandatory part of qualification theses and its purpose is to acquaint the reader with the nature and content of the work (it is used for searching in professional catalogues). It should contain the main idea of the work and its essence.

The purpose of the abstract is for the reader to be able to decide after reading whether it is beneficial to read the whole work. The abstract must work independently; the text must be clear and obvious to the reader even without knowledge of other contexts. For this reason, it is good to avoid foreign and technical terms that would need to be specified in more detail, and it is not appropriate to mention even lesser-known abbreviations.

The abstract should include the following:

- purpose of the work (what is the main topic of the work and what problems are solved here)
- what was the goal
- how the work was elaborated (what method or methodologies were used)
- what results have been achieved
- what are the recommendations and conclusions

The abstract for qualification theses follows the standard [ČSN ISO 214 Abstracts for publications and documentation](#). The abstract is not divided and structured; its **range is limited to one paragraph only. The recommended length is 15-20 lines** (the maximum number of characters and spaces is 1500).

The abstract never mentions the author's name; the subject in the sentences is always expressed in general: „The dissertation deals with...“ **The abstract is written in the language of the dissertation and in Czech. It is always located on a separate page** (see sample on the website of the Second Faculty of Medicine CU).

Examples of abstracts:

Alzheimer's disease represents an important socio-economic problem worldwide. Its complex and not entirely clear pathophysiological mechanisms are subject of intensive research with the aim to identify the affected individuals very soon in the disease process and to find efficacious prevention or treatment. According to recent knowledge, a multifactorial microangiopathy plays a role in the disease development. Probably both traditional vascular risk factors as well as mechanisms linked to neurodegeneration with amyloid accumulation are the factors involved. This work presents a summary of up to date knowledge about Alzheimer's disease vascular risk factors, signs of vascular impairment on brain imaging and possible interactions of vascular and neurodegenerative pathophysiological pathways. It focuses on the neurosonological signs of brain vascular impairment and presents own outcomes in this research area. Using cross-sectional and longitudinal design, the study demonstrates functional impairment of brain microcirculation in

patients with various cerebrovascular burdens and various degrees of cognitive decline and it identifies the most appropriate neurosonological parameter in the prediction of cognitive decline progression. On the same study sample it explores the association of other vascular factors and signs with the development and progression of Alzheimer's disease.

Alzheimerova nemoc představuje celosvětově významný socioekonomický problém. Komplexní a ne zcela objasněné patofyziologické mechanismy jejího vzniku jsou předmětem intenzivního výzkumu s cílem identifikovat nemocné velmi brzy v průběhu onemocnění a objevit účinnou prevenci či léčbu. V rozvoji onemocnění hraje podle výsledků výzkumu posledních let významnou roli mozková mikroangiopatie, jejíž etiologie je multifaktoriální. Podílejí se na ní pravděpodobně nejen klasická cévní rizika způsobující aterosklerózu, ale i procesy spojené s neurodegenerací a ukládáním amyloidu v mozku. Tato práce předkládá přehled dosavadních poznatků o cévních rizikových faktorech a cévních projevech Alzheimerovy nemoci na zobrazovacích metodách mozku a možných mechanismech interakce cévních a neurodegenerativních změn. Zaměřuje se na projevy poškození mozkových cév zjistitelné pomocí neurosonologického vyšetření a předkládá výsledky vlastního výzkumu v této oblasti. Pomocí průřezové a longitudinální analýzy prokazuje funkční poruchu mozkové mikrocirkulace u pacientů s různou tíží cévních rizik a s různou tíží kognitivního poklesu a identifikuje nejvhodnější neurosonologický parametr pro predikci rizika progresu kognitivních změn. Na stejném vzorku pacientů zároveň zkoumá souvislost ostatních cévních faktorů a projevů s tíží a progresí onemocnění.

The abstract must also contain the so-called „**keywords**“, which are words, compounds or phrases that concisely characterize the content of the submitted work. Keywords are not defined, they are just listed. They are written in a line and separated by a comma. **Those are nouns. Keywords need to be arranged alphabetically.**

For Czech keywords, it's a good idea to use Czech equivalents. Keywords are used mainly for searching works in databases, therefore it is necessary to choose such terms that accurately describe the topic of the work. **The recommended number of keywords is 5-10** (in the range of at least 30 characters).

Examples of keywords:

Alzheimer's disease, cerebrovascular reserve capacity, dementia, mild cognitive impairment, neurosonology, subjective cognitive decline, vascular hypothesis, vascular risk factors

Alzheimerova nemoc, cerebrovaskulární rezervní kapacita, demence, mírná kognitivní porucha, neurosonologie, subjektivní kognitivní pokles, vaskulární hypotéza, vaskulární rizikové faktory