

Big data has transformed into a trending phrase in [healthcare](#) and [neurosurgery](#), becoming a [pervasive](#) and inescapable phrase in everyday life. The [upsurge](#) in big data [applications](#) is a direct consequence of the drastic [boom](#) in [information technology](#) as well as the growing number of [internet](#)-connected devices called the [Internet of Things](#) in [healthcare](#). Compared with [business](#), [marketing](#), and other sectors, healthcare applications are lagging due to a lack of technical [knowledge](#) among healthcare workers, technological limitations in acquiring and analyzing the [data](#), and improper governance of healthcare big data. Despite these [limitations](#), the medical [literature](#) is flooded with big data-related articles, and most of these are filled with abstruse terminologies such as [machine learning](#), [artificial intelligence](#), [artificial neural network](#), and [algorithm](#). Many of the recent articles are restricted to neurosurgical registries, creating a false impression that [big data](#) is synonymous with registries. Others advocate that the utilization of big data will be the panacea to all healthcare problems and research in the future. Without a proper understanding of these principles, it becomes easy to get lost without the ability to differentiate hype from reality. To that end, Raju et al. give a brief narrative of big data analysis in neurosurgery and review its applications, limitations, and the challenges it presents for neurosurgeons and healthcare professionals naive to this field. Awareness of these basic concepts will allow neurosurgeons to understand the literature regarding big data, enabling them to make better decisions and deliver personalized care ¹⁾

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Raju B, Jumah F, Ashraf O, Narayan V, Gupta G, Sun H, Hilden P, Nanda A. Big data, machine learning, and artificial intelligence: a field guide for neurosurgeons. J Neurosurg. 2020 Oct 2;1-11. doi: 10.3171/2020.5.JNS201288. Epub ahead of print. PMID: 33007750.

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