

## Principle, Technique and Protocol in Orthopaedics

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Principle, as defined in Lexicon powered by Oxford dictionary, is 'the fundamental truth or proposition that serves as foundation for a system of belief or behaviour or for a chain of reasoning' [1]. In other word it is either a fundamental basis of a system of thought or belief. In orthopaedics principles thus develops on the understandings of the biology and bio-mechanics of human body parts and are achieved as a result of basic researches on those specific areas. Whereas techniques are the ways of carrying out a particular task, meaning which, they are the application of available appropriate technology to reach to the goal or principle [2]. Various techniques or their modifications are evidenced in literature. Any of them is best suited in an objective scenario. Scientific workers in their respective fields develop them by their systematic search and innovation. Protocol or guidelines would be the rational selection of one technique among the alternatives in the light of a given environment to determine present and future course of action [3]. This is developed by a group of experienced persons in a particular field or representatives from recommending bodies of different countries by analyzing available stronger evidences. Thus guide lines usually require up gradation with the arrival of newer evidences in technique commonly and also principle rarely. These basic understandings are applicable in the management of almost all orthopedic segments. As for example, the principles in trauma management are to ensure life of the patient, to ensure viability of the affected region, to correct components of deformation, to put in immobilization to achieve union in acceptable position and finally to obtain nearer to the pre-injury state function early. Where rehabilitation is the most important and constant component which is to be initiated as early as possible and to be continued after union even. These tasks can be carried out by non-invasive, semi-invasive or invasive techniques. Scientific workers devote their time and effort to understand the long and short term benefits and limitations, the cost issues, time of recovery in a particular subset of patients and infrastructure using a particular technique. As a result various techniques and their modifications are enriching orthopaedic literature for a particular condition. These works are tabulated as per the value of evidence depending on the study design and sample sizes. Meta-analysis, as secondary literature, and large randomized controlled trials, as primary literature, are considered to be the strongest evidence; whereas opinions from a veteran in his field without conducting study are weakest evidence. Others are in between them. Now in developing protocol or guideline for a particular fracture in a specific subset of patient and logistic supports few experts in that field are entrusted to analyze all evidences particularly stronger one and also existing guidelines, if any. This recommending body then select one technique for a specific environment. For a deviated environment they also recommend a second or a third specific alternatives also.

Guide lines, thus, ensures the uniformity of management in a specific condition, the providers are updated easily of the specific situation and finally, mistakes are minimized. For common orthopaedic conditions this is relevant. Rarely but at timed it may appear overdone also. But while dealing with rare diseases it is difficult, if not impossible, to formulate a protocol. In such situation provider need to consider the basic aim of management as principle and directly select one of the available techniques or improvise a new technique for that specific scenario. Thus a new technique evolve. Here lies the importance of publication of case reports and case series. In addition it also provide

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### Author's Photo Gallery



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information on clinical course and other behaviors of that particular condition. That facilitate recognition of the condition subsequently.

Most of the high impact Journals are unable to accommodate good number of case reports. Thus exclusive case reporting journal is a dire need of the day.

#### Message

While managing an Othopaedic patient, if not any, a clear understanding of principle, available techniques, and an appropriate selection of them is of paramount importance.

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1. A fundamental truth or proposition that serves as the foundation for a system of belief or behaviour or for a chain of reasoning. (n.d.). In LIXICO powered by Oxford. Retrieved from <https://www.lexico.com/definition/principle>
2. A way of carrying out a particular task, especially the execution or performance of an artistic work or a scientific procedure. (n.d.). In LIXICO powered by Oxford. Retrieved from <https://www.lexico.com/definition/technique>
3. The system of rules and acceptable behaviour used at official ceremonies and occasions. (n.d.). In Cambridge Dictionary. Retrieved from <https://dictionary.cambridge.org/dictionary/english/protocol>

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