LETTER TO EDITOR

inventi Spreading Knowledge

A Short Comprehensive and Imperative Note on Regenerative Pharmacology

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Pharmacology is the science of drugs and study of mechanism of action of drugs and lead compounds on the targets or target proteins or receptor molecules.

Since ages, pharmacology and pharmaco-therapeutics have emerged and have been contributing to the health sciences and medical industry through its innovation and rigorous hard work in order to find innovative cure and treatment protocols, for the enhancement of the medical sciences and for the benefit of mankind.

A newer concept has been coined, which is, "Regenerative Pharmacology". The regenerative pharmacology is defined as the pharmacology using newer tools and technology in order to reconstruct the receptor targets and cells or organ components, in order to adjust with the newly developed lead compounds for the better outcome of therapeutics applied in order to cure or find solutions for the ever increasing complexity of the diseases and ailments among the human beings.

The present letter to the editor has been written to keep in the interest of the scientists and healthcare practitioners across the world, to discuss and have a thought on this newly emerging field of medical science.

Pharmacology is the science of finding out the nature of drugs and molecular mechanisms in order to understand the behavior of drugs, or lead compounds or the newly designed molecules inside the human body and also to understand the behavior of human body with respect to these molecules. [1]

A newly coined term, i.e., "Regenerative Pharmacology", has emerged in recent times. The term regenerative pharmacology has close relation with the regenerative medicines, which has also emerged newly in the recent times. By the word, "Regenerative" in the medical world, it means something to recreate or to reconstruct. This has wide application to the medical science and biological sciences, as it purely means constructing new cells, organs, or in terms of pharmacology, reconstruction or repair of target receptors in the cells and organ systems.

Regenerative Pharmacology holds wide application to the medical science and healthcare industry, as it will help in purely reconstructing the old methods which have failed to bring results, in a newer manner which would ultimately result in the desired outcomes or the results from a particular therapy or therapeutics applied in order to find them, "Right cure for the Right disease". [2]

Regenerative pharmacology as it has been newly coined can help in bringing revolution in the healthcare and pharmaceutical industry. As take for e.g. In order to find cure for a brain disorder, such as, Alzheimer's disease, the receptor present in the corner of the brain, could be repaired or reconstructed in order to bring results positively with the newly introduced drug molecule. This way, the future pharmacologist would easily find the cure for the diseases, which in present scenario is not present. [2]

A regenerative pharmacology and pharmaco-therapeutics can help in devising newer and better cure through reconstruction and repair practices missing in the human body and can really change the overall scenario or the outcome from the newer developments in the field of pharmaceutical biotechnology or pharmaceutical industry, or in other aspects in the field of Biotechnology.

In other words, a Regenerative pharmacology is nothing but an amalgamation of two field of medical sciences, i.e., Pharmacology and Biotechnology or Bio-engineering.

Technology would anyways would bring changes in not only in the field of pharmacology but also in other aspects of the medical sciences such as internal medicines, or the obstetrics, etc.

The amalgamation of bioengineering or reengineering and pharmacology would result into Regenerative pharmacology which could even work at the, "Nano"–level. Regenerative pharmacology would help in reconstructing and re-engineering the pathways at the molecular level which can help in bringing out better treatment protocols or the result from the lead compounds applied or introduced in the patient's body in order to find a universal cure for any type of particular disease or the ailments. [3]

This idea of amalgamation of bioengineering and pharmacology from our side, is in affirmation that, it would spark discussions among the scientific fraternity across the world and newer technologies and areas or grey areas, can be highly explored in order to move towards, advances in the medical sciences.

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