



METFORMIN

The Gold Standard

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Why a book on Metformin?

From its introduction in clinical practice way back in 1957, to its current status as a pivotal oral anti diabetic agent, Metformin has travelled a long way. Today, it is available in 120 countries and more than thirty seven million prescriptions are written for Metformin annually. More than 5000 scientific papers have been published on it in various peer reviewed medical journals.

Like the old French wine, which tastes better and better as the time passes, Metformin's role in clinical practice has continuously enhanced, particularly over the last three decades. Like the eternal Taj Mahal, the beauty of which keeps on enhancing, the passage of time has enhanced the status of Metformin. It has completed fifty years in clinical practice for the management of diabetes. It is one of the longest surviving agents in the allopathic system across the various active pharmacological agents and the longest surviving oral anti diabetic agent. It has not only survived, but has phenomenally grown over the last two decades.

The agents from the Sulphonylurea [SU] family such as Tolbutamide, Acetohexamide and Chlorpropamide, which were introduced before Metformin, have ceased to exist long back. The biguanides such as Phenformin and Bulformin were discontinued about three decades back, while the survival of newer agents such as Rosiglitazone is at stake, due to its possible association with higher cardio vascular mortality. Not only has Metformin survived the longest, but more than five decades after its introduction in clinical practice, its use is still growing in the very indication for which it was introduced, i.e. Management of Type 2 Diabetes Mellitus.

This is in contrast with other rare long-term survivors, where the extended life span is due to their use in the indications, other than the original indication for which the active agent was initially introduced in clinical practice. Aspirin is currently being used as an antiplatelet agent, an indication totally unrelated to the original indication, for which it was introduced in the clinical armamentarium.

Today, Metformin has become a benchmark against which the new oral anti diabetic agents are being compared as regards to the efficacy, as well as safety profile, particularly cardiovascular safety.

Today, across the globe, Metformin is the most commonly prescribed oral anti diabetic agent; moreover, it is one of the most inexpensive agents. In a country like ours, the easy affordability of

Metformin is a great advantage. One tablet of 500 mg of Metformin costs less than a pan or a cheap brand of cigarette and while Metformin saves lives, tobacco kills!

The average Doctor is not well informed about the saga of some early setbacks during the developmental stage of Metformin and also during the initial phase in the first two decades after its launch. He would be interested in the fascinating story of the development, setbacks, consolidation and ultimate crowning glory of Metformin and also about pharmacological aspects such as pharmacokinetics, pharmacodynamics, tolerance, side effects, effects on cardiovascular systems, new indications, etc. Thus, an updated monograph on Metformin serving as a single source of all the information is very much needed and there is no better time than now. This monograph is primarily aimed at pragmatic Family Physicians and non specialists who are hands on clinicians with a large clinical workload, in other words, typical Indian Doctors who take care of majority of the country's large diabetic patient population.

My vast experience in interacting with them as a faculty for their Continuing Medical Education and also as an author of Books on Diabetes aimed for these Doctors, has made me clearly understand their needs. They are comfortable with a simple narrative language converting hard scientific data into simple information. Thus, I have made an effort of writing a quasi scientific book. I hope the reader will enjoy the fascinating story of the development of Metformin, its initial roller coaster ride and its subsequent success along with its pharmacological and clinical aspects. I am sure many would like to preserve the book as a souvenir to commemorate Metformin.

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