

## AN OVERVIEW OF THE CHANGES IN THE RABIES SCENARIO OF INDIA IN THE LAST THREE DECADES

In the Last Three Decades very significant changes in the Rabies Scenario of India has taken place.

**The most significant changes in the last three decades are as follows:-**

- 1) **There has been a great increase in the availability of many high quality anti-rabies vaccines, rabies immunoglobulins and rabies monoclonal antibodies.**
- 2) **The number of patients seeking Rabies PEP, timely.**
- 3) **The number of centers offering proper Rabies PEP, even in remote parts of the country has increased many folds.**
- 4) **There has been a marked reduction in the number of Rabies cases.**

In the beginning of 1987 only Semple Vaccine was used in the Govt. Hospitals and clinics. Anti- Rabies Serum was used at the ARC of CRI Kasauli, and similar places only. Only one TCV called MIRV [HDCV] was available in very few places. Most GPs, to whom, most people approach for remedies to their medical problems, did not treat the animal bite victims. They used to refer them to the Govt. ARCs, some very far away. Now, after 30 years there are 12 brands of modern anti-rabies vaccines available to the clinicians for managing animal bite cases. There are 2 brands of HRIG, 3 brands of ERIG and One brand of R-Mabs available for passive immunization. Many GPs are treating animal bite cases very confidently and correctly. Some are using R-Mabs, HRIG, and ERIG where applicable. This change in the approach in managing animal bite cases among GPs was due to the innumerable CMEs organized throughout the country. These CMEs were successful in changing the approach to animal bite cases among GPs. The resource persons or the speakers in these CMEs were mostly APCRI members. The CMEs were mostly sponsored by different corporate houses marketing different brands of Rabies vaccines and immunoglobulins.

**From 2003 to 2005 there was an ICMR study evaluating the TCVs produced in India against a TCV pre-approved for IDRV by WHO and manufactured outside India [Verorab], This study was done under a directive from the Drugs Controller General of India [DCGI] prior to giving its approval for use of IDRV in India..**

**In 2005, a very significant change took place. It was the total stoppage of the use of Semple Vaccine [NTV] in the Govt. Hospitals and ARCs. It was replaced by TCVs used in Essen Schedule. There were vaccine shortages in many centers.**

**In 2006, the Drugs Controller General of India [DCGI] allowed the use of IDRV in selected clinics fulfilling certain criteria.**

**From 2006 onwards IDRV was started in Govt. Hospitals and Clinics.** Now more than half of the total number of States and Union Territories use IDRV in their Hospitals and ARCs. There is no vaccine shortage in those places where IDRV was used. This is due to the fact that the cost of a full course of PEP is much less, and with the same amount of vaccine many more persons can be vaccinated.

**Formation of APCRI:** There was no professional association to help those doctors who worked at the ARCs. On 17<sup>th</sup> April, 1998 the Association for Prevention and Control of Rabies in India was born with the objective of having a Scientific and Professional platform to focus on Rabies and its Control. Annual Conferences on Rabies and its Control began to be organized every year from 25<sup>th</sup> July, 1999 onwards.

APCRI Journal was first published on 25<sup>th</sup> July, 1999 and was published once a year from 1999 to 2006. From 2006 till now it is published twice a year. This journal has increased the knowledge base of everyone interested in Rabies Control.

**In 2003 - 2004 the WHO-APCRI national multicentric survey to assess the burden of rabies in India was carried out.**

**APCRI was mainly instrumental in stopping the use of Semple Vaccine [NTV] and introduction of IDRV in Govt. Hospitals and ARCs. This has resulted in much better access to modern PEP to the people of India.**

**Incidence of Rabies in India:** About 30 years ago the Govt. of India Reported the Mortality from Rabies to be 25000. This figure finds its place in the Training Manual on Rabies from the National Institute of Communicable Diseases, Delhi, of 1987. In 1996, the official figure from NICD was 30,000.

In 2003 the WHO-APCRI national multi-centric survey to assess the burden of rabies in India was carried out. The report of this survey was published in 2004. The mortality from Rabies in India was reported to be 20565. This is the last and only methodical work on this issue till now.

**There is a great need of knowing the real incidence of Rabies in Humans, Dogs and other animals.** Various types of data not tallying with one another, generated by various agencies of Govt. and NGOs are available. It is very confusing.

**Dog bite is the primary source of human rabies. There is no surveillance system for animal rabies. As a result, the impact of rabies in livestock is unknown. Dog rabies control and dog population management are being neglected.** There has not been much progress in this sector in the last three decades. Without control of the disease in the Animal Vector it will be very difficult to make India Rabies Free by 2030.