It's all in genes

❑ SRMC & MedGenome launch genomic centre
❑ It will cover all diseases and not just one particular type

Centre for Sports Science (SRMC) director S Arumugam, professor of eminence & dean (research), S P Thyagarajan, MedGenome Labs chairman and founder Sam Santhosh, chief operating officer Dr V L Ramprasad, Dr K Satish Srinivas during the inauguration of genomic centre at SRMC in Chennai on Wednesday.

NT Bureau

Chennai, Feb 1:

'Almost 8,000 diseases occur purely because of hereditary and genetical disorders and this makes the genomic centres in India essential ones,' says MedGenome COO, Dr V L Ramprasad.

He insisted that the only appropriate way to cure cancer was to treat it genetically by identifying the correct mutation type in a particular gene.

ONLY REASON

There are as many as 8,000 genetical disorders. Some of them common in India are Thalessemia, sickle cell anaemia, leukemia, breast cancer, muscular dystrophy, epileptic disorders, immuno deficiency disorders, congenital adrenal hyperplasia, etc.

Sri Ramachandra Medical College, in association with MedGenome, yesterday launched the genomics centre by Dr Sachdev Sidhu from the University of Toronto, Canada.

Dean of research, S P Thyagarajan, SRMC, said at the launch, 'Unlike before, genetic studies are widely used in diagnosing diseases more than for research purpose these days. This can be called a proper technological tool for treatment of diseases like cancer and 10 other fields.'

Talking to *News Today* on the sidelinees of the event, Dr Ramprasad said, 'Like how our traits come from our ancestors, the diseases, too, invade our genes. This, commonly called as hereditary diseases, can now be treated in the genes itself due to the advanced technological development. In case of cancer, even the mutation is studied and medicines are prescribed appropritely. For example, in the case of lung cancer, the patients have mutation EGFR and they are not treated by a specific drug. They are given common drugs for cancer or undergo conventional chemotherapy which has a survival rate for 3 to 5 months, or maximum 10 months.'

GENE SCREEN

'Each gene has different mutations and the medicine works on the basis of that mutation. For example, in case of leukemia, no clinician can treat the patient without proper genetic screening. Also, when an individual's ancestors have had breast cancer, they must undergo genetic screening from the late 30s,' said Dr Ramprasad.

The genomic centre in Chennai will be an all-inclusive one - in the sense that it would be equipped to deal with all kinds of diseases and just one particular type. Patients will be prescribed drugs appropriate to their genetic disposition, said Ramprasad. The patients would also be counselled before and after the treatment. Another major point the doctor made was that it was becoming affordable for patients - the rates have come down from before and will go down further.

SURVEILLANCE PAYS

'People generally do not care to check their bodies at the correct age. Most cancers are curable in stage 1 and 2 whereas people, especially in our country, due to lack of proper check-ups, come to us in stage 4 and 5. Pre-disposition by screening will help cure diseases,' the doctor said.

FROM EMBRYO

When a couple's first child is affected by some major disease, then they can do in vitro fertilisation for the second, where the embryo is tested for the occurence of the disease and corrected immediately.