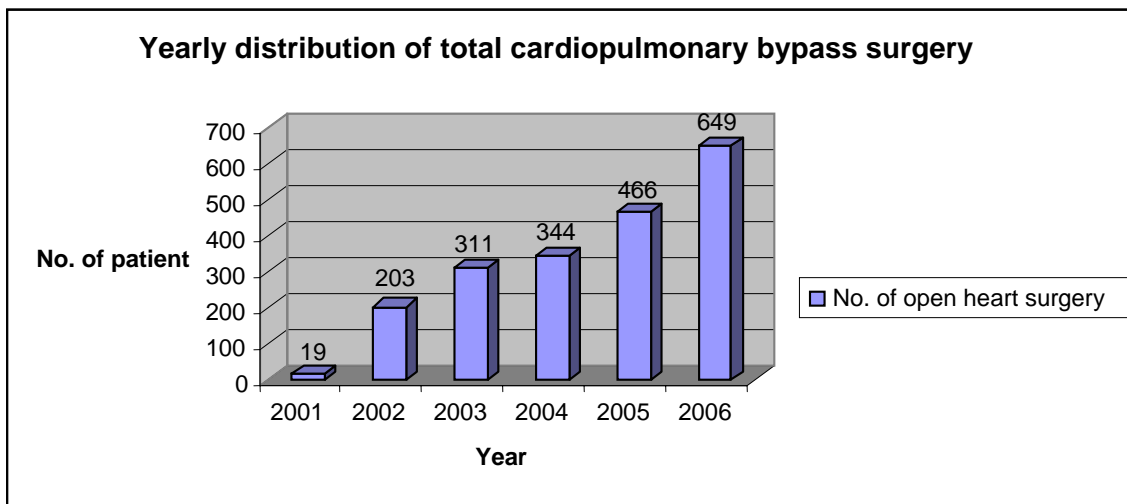


# ANNUAL REPORT OF PERFUSION TECHNOLOGY UNIT - 2006

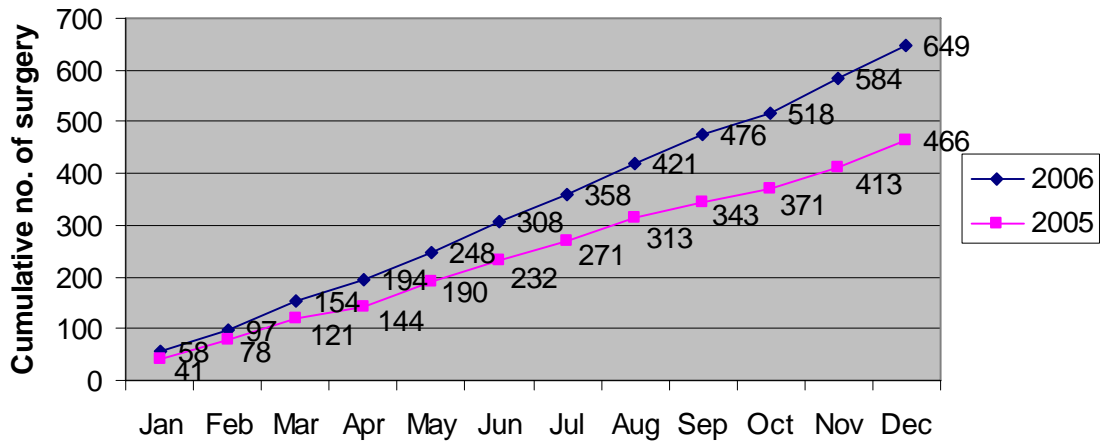
- Satya Narayan Chaudhary,  
*Senior Perfusionist*

The main function of the perfusion technology unit is to run the heart-lung machine which acts as artificial heart and lungs during open heart surgery. In 2006, we ran the heart-lung machine in 649 cases of the total 1012 CV surgeries done here. This is 39.27% increase in the pump cases as compared to the last year. The graph below shows the yearly distribution of pump cases.



Out of the total cases, 45% cases were females and 55% cases were males. The cumulative line chart below shows that there is a significant increase in the total no. of open heart surgery in the year 2006.

Cumulative open heart surgery 2005 vs. 2006



There has been a significant increase in the number of pediatric cases this year, due to Children Assistance Program (CAP) launched by the Government of Nepal. Although there is an increase in paediatric cases we used only 21% pediatric oxygenators. This is because of the use of adult oxygenators on older children. We have designed our own custom pack of which in 2006 we used 70% Adult, and 30% Paediatric.

Amongst the cases that required Cardiopulmonary Bypass, 48.69% were Valve, 40.20% Congenital and 8.32% On-pump CABG. There were few combined procedures of which 0.31% was Congenital with CABG, 1.23% CABG with Valve, 0.77% Cardiac Tumors and 0.46% Miscellaneous.

In the year 2006, we introduced Modified Ultra-filtration (MUF) and retrograde autologous priming techniques. We are planning to introduce mini-bypass and close circuit bypass technique in near future. We are in the process of acquiring a new sophisticated heart-lung machine with many safety features.

We are actively participating in academic programs as well. In 2006, Mr. Satya Narayan Chaudhary had presented separate papers on the Annual Conference of Perfusionists of India and Annual Conference of Perfusionist of Great Britain on ***Perfusion Information System***: A Computerized Perfusion Datasheet System.

We provided training in Perfusion techniques to a Doctor from North Korea.

The Perfusion Technology Unit includes the following members:

- |                            |                       |
|----------------------------|-----------------------|
| 1. Satya Narayan Chaudhary | Senior Perfusionist   |
| 2. Mahendra Bhatta         | Visiting Perfusionist |
| 3. Umesh Khan              | Perfusion Assistant   |