6.0 Conclusion
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1. MAbs were prepared using an Indian strain (955879) of HRSV isolated at NIV, Pune.
2. All the MAbs obtained were specific to the major proteins of nucleocapsid complex, 4 against N protein and 25 against P protein of HRSV.
3. NIV IF and NIV ELISA were standardized using these MAbs. Evaluation was done using Chemicon IF kit as ‘gold standard’. Chemicon RSV MAb was a mixture of MAbs to F, G and N proteins of HRSV.
4. A total of 134 NPA specimens were collected from acute respiratory cases from IPD and OPD of KEM Hospital, Pune, in the year 2002, which also included specimens from a local outbreak during the months of July through October 2002. These specimens were used in the standardization and evaluation of NIV IF and NIV ELISA.
5. NIV IF test using N MAb was standardized and was comparable to Chemicon IF, giving sensitivity 93.75%, PPV 100%, specificity 100%, NPV 96.36%.
6. NIV ELISA using P MAbs was standardized and when compared to Chemicon IF, gave sensitivity 85%, PPV 100%, specificity 100%, NPV 95.89%.
7. NIV ELISA is able to detect as low as 60 ng of HRSV proteins.
8. NIV ELISA is able to detect as low as 10 PFU of HRSV in a given stock.
9. During the evaluation of NIV tests employing NPA specimens, it was possible for us to investigate a local outbreak of HRSV during the year 2002.
   a. HRSV was active in and around Pune city, with peak activity in monsoon season.
   b. During peak activity of HRSV, 53.1% of the hospitalized LRI patients had HRSV etiology whereas for OPD patients it was 11.3%.
   c. In the OPD and IPD patients positive for HRSV etiology, male to female ratio was (2.5:1) and (4.2:1) respectively.
   d. Most affected age group in IPD patients having HRSV infection was 1-3 months and in OPD patients it above 12 months.

NIV IF and NIV ELISA developed during this study are satisfactory for the rapid detection of HRSV from clinical specimens. They will be helpful in the study of HRSV epidemiology. The data obtained during the investigation of HRSV local outbreak during the year 2002 will serve as a baseline data for future studies on HRSV.