Introduction: Congenital Anomalies are the birth defects which may be morphological, biochemical or behavior of all births that has been induced during any stages of pregnancy.

Materials and Methods: The objective of the present study is to know the various types of Anomalies the percentages of incidences of Anomalies and to compare and correlate the present study with available literatures.

R.L. Jallappa Teaching Hospital of Sri Devraj Urs Medical College, Tamaka, Kolar Karnataka from 15.02.2007-15.07.2007-Five Months Study

Results: Sixty anomalies were observed in live births in the Departments of Surgery and fifteen anomalies in Radiology in the above hospital. The age group of malformations were new born to adult age group. They were seen found 73.00% in males and 27% in females. The overall percentages of incidences of Anomalies in the present study were 2.17%. This study was later compared and correlated with earlier workers and with the available literatures.

Conclusion: Ultrasound can diagnose most of the congenital anomalies

Key words: Surgical Anomalies Still births and Congenital Malformations.
born to adult aged group in the department of Surgery. The congenital malformations were observed in 60 cases of live births.

In all cases, detailed history of personal, family, previous similar complaint, systemic diseases associated diseases any complications any genetic disorder were taken. This is followed by thorough clinical examination which includes general & physical examinations. In general examination build nutrition, presence and absence of cyanosis; jaundice, clubbing, and lymphadenopathy; examination of eyes & skin were observed.

In physical examination, pulse rate heart rate, and all the peripheral pulses were noted down. Later, systemic examination of respiratory, cardiothoracic, gastrointestinal anomalies of internal organs (viscera's of Gastrointestinal system, Hepato biliary system).

4) **Ultra sound of the Pelvic cavity was also done.**

Ultra sound of the Pelvis was also taken to study or rule out congenital malformations of pelvic organs like uterus and its adnexae, Urinary Bladder (Genito urinary System).

**Results**

Total numbers of cases with congenital anomalies were sixty. All were from the Gastro intestinal systems. The age groups were from the new born to 18 years of age. The anomalies were observed more in males than in females. All the anomalies were found in live births.

<table>
<thead>
<tr>
<th>Table:1 Case details</th>
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</thead>
<tbody>
<tr>
<td>S/no</td>
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<td>8</td>
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<tr>
<td>9</td>
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<tr>
<td>10</td>
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<tr>
<td>Total</td>
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</tbody>
</table>

From the above table it is observed that

1) **44(73.33%) anomalies were found in males**, 16(26.66%) in females.

2) **44(73.33%) anomalies were observed in new born babies.**

3) 13(21.66%) anomalies were seen between the age groups of 5-18 years.

4) One (1.66%) female case was sixteen years old.

5) No. still Births. anomalies.

From the Radiology Department, fifteen anomalies were observed by ultra sound studies during antenatal check up. The following were the rare anomalies (ONLY ONE ANOMALY) that were found during antenatal check up:

1) Osteogenic imperfect
2) Achondroplasia.

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3) Imperforate Anus:- Absence of gas in the lower half of the gut
4) Micro colon.
5) Congenital pyloric stenosis.
6) Chiari Malformation.

The commonly found anomalies were
1) Anencephaly.
2) Hydrocephalus.
3) Meningocele.
4) Myelomeningocele.
5) Ventricular Septal Defect (VSD)
6) Atrial Septal Defect (ASD).

All the above anomalies were diagnosed only in the third trimester.

Discussion

Congenital anomalies are broadly grouped as Major and minor. Those malformations likely to cause disability, disfigurement or threat to life were classified major Defect. Minor Defect is the one which is neither of medical nor cosmetic consequence to the patient.

Reported Incidence of anomalies is as follows:-
1) Afghanistan (Kabul) ————55/1000 lives births.
2) Egypt- ————-31.67/live births
3) Libya ————-9.3/1000 live births.
5) New York- ————-75/1000 live births.

Reported Incidence of anomalies in India are as follows :
1) Hyderabad— 33.00/1000 live births.
2) New Delhi ———— 33.76/1000 live births.
3) Allahabad 14.65/1000 live births.
5) Mumbai ————- 2.9/1000 live births.
6) Kolka ————- 3.1/1000 live births.
7) Chandigarh ————- 36/1000 live birth.

Previous studies on Anomalies done at Nepalgunj Medical College, Nepalgunj, Nepal SHOWED incidence on anomalies was 1.4%. Congenital heart disease like situs inversus with Dextrocardia were more commonly found in Banke Districts of Nepal Neural tube defects like Anencephaly, Lipomyelomeningocele were more prevalent than in other parts of Nepal. Few of them were surgically corrected. Like previous study they were also more common in males.

Similarly second study showed higher incidences of 2.8% of congenital anomalies. They were found more in males observed higher in gastrointestinal system (22.85%) followed by musculoskeletal system and genito urinary system (14.25%). Some rare anomalies like colloidin baby, absence of metacarpal bones, gaucher’s disease, neglected cretin were found.

<table>
<thead>
<tr>
<th>Sr/No</th>
<th>Author/Year</th>
<th>Region</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ghosh and Bail.L</td>
<td>1963 Delhi</td>
<td>34.0</td>
</tr>
<tr>
<td>2</td>
<td>Stevenson AC et. Al. WHO.</td>
<td>1966 Mumbai</td>
<td>8.6</td>
</tr>
<tr>
<td>3</td>
<td>Stevenson AC et. Al. WHO.</td>
<td>1966 Kolkota</td>
<td>3.1</td>
</tr>
<tr>
<td>4</td>
<td>Mathur B.C</td>
<td>1975 Hyderabad</td>
<td>31.00</td>
</tr>
<tr>
<td>5</td>
<td>Choudhary et.al</td>
<td>1984 Kolkota</td>
<td>2.9</td>
</tr>
<tr>
<td>6</td>
<td>Mishra P.C et. al</td>
<td>1989 Allah bad</td>
<td>14.64</td>
</tr>
<tr>
<td>7</td>
<td>Govaralingappa</td>
<td>1994 Hubli</td>
<td>12.00</td>
</tr>
<tr>
<td>8</td>
<td>Datta et.al</td>
<td>2000 Sevagram.</td>
<td>12.4</td>
</tr>
<tr>
<td>9</td>
<td>Jai Renukarya et. al</td>
<td>2004 Bengaloroo</td>
<td>5.32</td>
</tr>
<tr>
<td>10</td>
<td>Present study</td>
<td>2007 Kolar</td>
<td>2.17%</td>
</tr>
</tbody>
</table>

From the above table, it is observed that:
1) Highest incidence of anomalies was found in studies of Ghosh and Bail.L in the year 1963 which was conducted at Delhi-34.00%.
2) The next higher incidence was 31.00, done by Mathur B.C in the year 1975 which was conducted at Hyderabad.

Present study done at Kolar (2007) -2.17% which is the least incidence. (may be due to small number of cases)

Table 3:

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Sex of the child</th>
<th>Total Numbers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>32</td>
<td>52.46%</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>28</td>
<td>45.90%</td>
</tr>
<tr>
<td>3</td>
<td>Ambiguous</td>
<td>01</td>
<td>01.64%</td>
</tr>
</tbody>
</table>

The present study done at R.L Jalappa, Tamaka, Kolar in the current year 2007 showed the following percentages of incidences in males and females

Table 4:

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Sex of the child</th>
<th>Total Numbers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>.44</td>
<td>73.33% %</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>16</td>
<td>26.66% %</td>
</tr>
<tr>
<td>3</td>
<td>Ambiguous</td>
<td>00</td>
<td>00.00%</td>
</tr>
</tbody>
</table>

Table 4 shows higher incidences in males (73.33%) than in females (26.66%). The incidence is (52.46%)

Hereditofamilial and consanguious marriage have played vital role in the development of anomalies. It has also been reported that incidences of anomalies are much higher in the still births than in live births as reported by Datta et
Their studies have reported an incidence of 1.24%. In the year 2002 there were three still births namely craniothoraco phagus, anencephaly, syringomyelia, found at Nepalgunj Medical College Teaching Hospital, Nepal. Even some rare anomaly like Absence and fusion of ribs, Lipomyelomeningocele were observed in live births.

But in the present study (2007), no incidence of still births as well as like above incidences in live births was observed. A male child aged nine months was diagnosed to have congenital diaphragmatic hernia of poster lateral type on radiological examination in the pediatric O.P.D. at Nepalgunj Medical College Teaching Hospital, Nepalgunj, Nepal. But in the present study no such above anomaly was found.

Two important rare cases were found in the department of ophthalmology. They were

1) Golden Harr Syndrome
It is a developmental Anomaly of Second Branchial Arch seen in female aged 23 years old. It is an Auriculo-OcculoVertebral Anomaly characterized by following features: i) Coloboma in the upper and lower eye lid. ii) Pre auricular appendage, iii) Vertebral Anomalies-Scoliosis, Kyphosis, and Lardosis. iv) Facial Asymmetry.

2) Trachers Collins Syndrome was seen in male aged 25 years characterized by
1) Lid Coloboma. 2) Maxillary Hypoplasia. 3) Mandibular Recession. 4) Pre Auricular Sinus or Fistula 5) Conductive Deafness.

Conclusion
Sixty anomalies were studied in the surgical department. All the anomalies were found in live births. They were predominantly seen in males (73.00%) than in females (27.00%). But there were no cases of still births as seen in previous studies Incidence of anomalies in department of surgery was 2.17%. The age groups were between new born to eighteen years of age. Forty four anomalies were observed in new born babies. Thirteen anomalies (21.66%) were between five to eighteen years of age. Fifteen anomalies were observed by ultrasound studies during ante natal check up in the department of Radiology, out of them seven cases were extremely rare cases, while others commonly found anomalies.

Acknowledgements
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Professor and Head of Department of Surgery
Professor and Head of Department of Radiology

References