<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>1 April 2008</td>
<td>Golden Day Trauma Care Programme</td>
</tr>
<tr>
<td>9 Sep 2008</td>
<td>Public - Private Partnership</td>
</tr>
<tr>
<td>10 Feb 2009</td>
<td>Ortho Skills Lab</td>
</tr>
<tr>
<td>31 March 2009</td>
<td></td>
</tr>
</tbody>
</table>
Another eventful year has passed and it is time for me to take stock of the progress made over the last 365 days. Looking back I can only say that the year has been a successful one, one, in which the Department of Orthopaedics has made large strides towards achieving the status of a centre of excellence.

Many significant milestones were laid down in the academic year 2008-09, significant amongst which were the signing of the Memorandum of Understanding between the Department of Orthopaedics, Madras Medical College and Depuy Johnson & Johnson Ltd. towards establishment of a Orthopaedic Bioskills lab at a cost of 25 lakhs. This is a landmark public-private initiative to train young orthopaedic surgeons.

The Golden Day Trauma Care Programme was started on 28th July 2008 and has proved to be very successful in giving complete emergency orthopaedic care to the patients. It has been my dream to see the Department functioning in such a way that the patients are benefitted by immediate, complete and competent orthopaedic management of their fractures. I am happy to say that this dream is fulfilled and my department is a source of envy for the private set up as well.

The Department was also recognised as a centre for research towards the awarding of the Ph.D. This will encourage more original research from the students and assistant professors. Another landmark was the initiation of an Implant Bank in the Department. This will be a platform for philanthropists to contribute to the care of the poor and needy.

In the academic front, my post graduates and assistant professors have been actively pursuing research projects. Many articles have been published in International, National and State Journals. My Department has been in the forefront in scientific discussions in various state and national conferences, with the post graduates bringing back a clutch of awards.

In between all these highs we as a Department also had our lows, especially the passing away of doyens such as Prof. T.K. Shanmugasundaram, Prof. T.S. Xavier and Prof. C.T. Mannar. These great men will be always remembered for their services and will continue to guide my department in spirit.

It is my 5th year at the helm of this Department and the only way that I have seen this Department grow is in the path of success. I will continue working towards newer goals and greater achievement. I also take this opportunity to thank my parents, teachers, colleagues and post graduates for aiding me through my endeavours.

Prof. Mayil Vahanan Natarajan
M.S.Orth. (Ma’s) M.Ch.Trauma (L’pool) Ph.D. (Orth. Onco.)
D.Sc. (Onco.Surg.) D.Sc. (Hon.)^3 F.A.M.S. F.R.C.S. (Eng.)
Head & Heart, Dept. of Orthopaedic Surgery
Govt. General Hospital & Madras Medical College
Chennai - 600 003
DEPARTMENT OF ORTHOPAEDIC SURGERY

HEAD & HEART OF THE DEPARTMENT

*Padma Laureate*

**Prof. Mayil Vahanan Natarajan**
M.S.Orth. (Ma's) M.Ch.Trauma (L'pool) Ph.D. (Orth.Onco.)
D.Sc. (Onco.Surg.) D.Sc. (Hon.)³ F.A.M.S. F.R.C.S. (Eng.)

ADDITIONAL PROFESSORS
Dr. R.H. Govardhan, D.Orth. M.S.Orth.
Dr. V. Thulasiraman, D.Orth. M.S.Orth.
Dr. S. Subbiah, D.Orth. M.S.Orth.

READERS IN SPINE SURGERY
Dr. R. Subbiah, D.Orth. M.S.Orth.

ASSISTANT PROFESSORS
Dr. R. Selvaraj, D.Orth. M.S.Orth. DNB.Orth.
Dr. V. Mazhavan, D.Orth. M.S.Orth.
Dr. B. Pasupathy, D.Orth. M.S.Orth. DNB.Orth.
Dr. T.R. Ramesh Pandian, M.S.Orth.
Dr. N.B. Thanmaran, D.Orth. DNB.Orth.
Dr. Antony Vimal Raj, M.S.Orth.

TUTORS
Dr. A. Shanmugasundaram, M.S.Orth.
Dr. K. Velmurugan, M.S.Orth. DNB Orth.
Dr. K.P. Manimaran, M.S.Orth.
Dr. Senthil Sailesh, M.S.Orth.
Dr. R. Prabhakar, M.S.Orth.
Dr. S. Karunakaran, M.S.Orth. DNB.Orth.
Dr. Nalli R. Gopinath, D.Orth. DNB.Orth.
Dr. R.A. Sashidhar, D.Orth.
Dr. N. Muthalagan, D.Orth.
### POST GRADUATE STUDENTS (M.S.Orth.)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Dr. A.P. Sivakumar</td>
<td>Dr. B. Navin</td>
<td>Dr. Srivatsa</td>
</tr>
<tr>
<td>Dr. Rajadurai</td>
<td>Dr. Anjan</td>
<td>Dr. Raj Ganesh</td>
</tr>
<tr>
<td>Dr. I. Geethan</td>
<td>Dr. S. Ashok</td>
<td>Dr. Rajasekar</td>
</tr>
<tr>
<td>Dr. S.P. Elangovan</td>
<td>Dr. Jayakumar</td>
<td>Dr. Boopathy</td>
</tr>
<tr>
<td>Dr. Dhanesh Prasad</td>
<td>Dr. A.N. Sarath Babu</td>
<td>Dr. Arun</td>
</tr>
<tr>
<td></td>
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<td>Dr. Anand</td>
</tr>
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### POST GRADUATE STUDENTS (D.Orth.)

<table>
<thead>
<tr>
<th>2007 - 2009</th>
<th>2008 - 2010</th>
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<tbody>
<tr>
<td>Dr. J. Viswanath</td>
<td>Dr. Senthil Kumar</td>
</tr>
<tr>
<td>Dr. Manoh</td>
<td>Dr. Senthilnathan</td>
</tr>
<tr>
<td>Dr. Naser</td>
<td>Dr. Anbarasu</td>
</tr>
<tr>
<td>Dr. Karthik</td>
<td>Dr. Santhanakumaran</td>
</tr>
<tr>
<td>Dr. Arulmurugan</td>
<td>Dr. Sanjay</td>
</tr>
<tr>
<td>Dr. Suguna Rani</td>
<td>Dr. M. Viswanath</td>
</tr>
<tr>
<td>Dr. Padmarajan</td>
<td>Dr. Vasanthan</td>
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### PHYSIOTHERAPISTS - GRADE 1

<table>
<thead>
<tr>
<th>2007 - 2009</th>
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<tbody>
<tr>
<td>Mr. P. Krishnan</td>
<td>Mrs. M.R. Anusuyadevi</td>
</tr>
<tr>
<td>Mrs. N. Vetrimani</td>
<td>Mr. S. Krishnasamy</td>
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### PHYSIOTHERAPISTS - GRADE 2

<table>
<thead>
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<tr>
<td>Mr. M. Ganeshram</td>
<td>Mrs. S. Ravathi</td>
</tr>
<tr>
<td>Mr. E. Kesavan</td>
<td>Mr. B. Senthilkumar</td>
</tr>
<tr>
<td>Mr. R. Neelamegam</td>
<td>Mr. K. Karthikeyan</td>
</tr>
<tr>
<td>Mrs. F. Maria Rita</td>
<td>Mrs. W. Vasanthi</td>
</tr>
<tr>
<td>Mrs. D. Gomathi</td>
<td>Mr. S. Adam Vinnarasan</td>
</tr>
</tbody>
</table>

### SOCIAL WELFARE OFFICERS

Mr. R. Narayanan, M.A.  Mr. M. Murugan, M.A.

### NURSING TUTOR

Mrs. Vijayalakshmi

### OP STAFF NURSE

Mrs. Mohan Kalpana

### OT STAFF NURSE

Mrs. Bhuvaneswari  Mrs. Kalyani

### JUNIOR ASSISTANT

Mrs. Faiz Jehan Begum

### STENOGRAPHER

Mrs. K. Geetha

### RECORD CLERK

Mr. Alphonse

### PLASTER TECHNICIANS

Mr. Surendra Babu  Mr. D. Mohan Raj  Mr. E. Durai Raj
BRIEF HISTORY OF THE DEPARTMENT

HOW IT ALL BEGAN / GENESIS
The first Orthopaedic service in Tamil Nadu was started in Govt. General Hospital in the year 1929 initially as an outpatient service. In the year 1931, inpatient facilities were started. Dr. M.G. Kini was the first person to qualify in orthopaedic surgery in Tamil Nadu, serving in this department between 1929 to 1931. In 1949 a separate Orthopaedic department was established. Lt. Col. V.R. Thayumanaswamy was the first Professor of Orthopaedic Surgery.

GROWTH AND EXPANSION
- In 1957, Prof. M. Natarajan took over as Professor of Orthopaedics. He continued to head the Department for 19 years till 1976. During his period there was expansion of the department with addition of beds, introduction of post graduate courses in Orthopaedics and allied specialities such as Physical Medicine & Rehabilitation.
- Prof. T.K. Shanmugasundaram pioneered the starting of the PL 480 scheme for the Traumatic Paraplegics and the MRC Trial for TB Spine.
- Prof. S. Soundarapandian and Prof. S. Rajagopal worked hard to establish the Paraplegia block.
- After this, successive Heads of the Department - Prof. T.S. Xavier, Prof. K. Sriram, Prof. C.T. Alagappan, Prof. K. Annamalai, Prof. M. Subramanian, Prof. K. Chandran, Prof. S.N. Motilal, Prof. R. Dhanapal have worked hard to improve the standard of this department.
- On 1st March, 2005, Prof. Mayil Vahanan Natarajan took over as the Head of the Department.

THE DEPARTMENT - NOW
With current bed strength of 329 beds, the Department of Orthopaedic Surgery, Govt. General Hospital is the “LARGEST” Department in a GOVERNMENT HOSPITAL SET UP in the WHOLE OF INDIA.

WARDS
Ortho Trauma Ward (Ward 205)
A separate Emergency Trauma Ward for orthopaedic trauma cases is being run by one qualified orthopaedic surgeon, two M.S. Ortho and two D.Ortho post graduates, round the clock, 24 hrs. a day, 365 days a year. On an average, there are about 15 admissions per day in this trauma ward alone, not mentioning the numerous Orthopaedic cases seen in the Surgical Trauma ward. All these patients need closed reduction / minor or major emergency surgeries which are done on day one with zero delay truly establishing the emergency trauma care concept.
Emergency Trauma Theatre
There is a well equipped trauma theatre serving round the clock, with state of the art equipment and facilities, with trained staff nurses helping the trauma team to treat open fractures as well as dislocations, as soon as the patients are received.

Intensive Trauma Care Unit (ITCU Ward 214)
The ITCU has been commissioned to offer round the clock intensive care to poly-trauma patients. This ward has all emergency support equipments including ventilatory support and access to all emergency life saving facilities. It is a shining example of effective and emergency trauma care. It is equipped with nurses well trained in the nuances of intensive trauma care.

General Wards
We have 2 separate male wards of 40 beds each, 2 female wards of 40 beds each, a paediatric ward with 12 beds and a septic ward with 60 beds. In addition, we have separate post operative wards and intermediate care wards making the total orthopaedic bed strength to 329.

Ortho Spine Ward
A separate male and female ortho spine ward with a total bed strength of 26 serves the paraplegic and quadriplegic patients, exclusively.

Elective Operation Theatres
Our department has been allotted 3 state of the art operation theatres with 2 tables each. This has tremendously increased the number of surgeries performed by the Department thereby drastically reducing the waiting time of the patients for surgery. These theatres have laminar airflow facilities, two C-arms, centralized suction and air supply which make them suitable for doing modern surgeries like arthroplasty, arthroscopy etc.
SPECIALISED SERVICES

24 hrs. Fracture Services (Unique)
- A fully equipped fracture services facility is available 24 hours a day, 365 days a year with a M.S.Orth. qualified surgeon available on the site with two M.S.Orth. post-graduates and two D.Orth. post-graduates.

Orthopaedic Oncology
- Limb Salvage for bone tumour by Custom Mega Prosthesis
- Limb Salvage for bone tumour by Allografts

Reconstructive Orthopaedics (Ilizarov)
- Limb reconstruction / stabilization after bone loss / infection
- Deformity correction
- Treatment of complex non-unions, mal-unions

Spinal Surgery
- For Cervical, Dorsal and Lumbar Spinal Injury
- Pott’s spine
- Intervertebral disc surgery

Minimally Invasive Surgery
- Hip Replacements
- Arthroscopic (Keyhole) Surgeries

Total Joint Replacement
- Uncemented / Cemented Total Hip Replacement
- Total Knee Replacement
- Surface Replacement of Hip
<table>
<thead>
<tr>
<th>Unit / Ward</th>
<th>TOWER BLOCK</th>
<th>OLD BLOCK</th>
<th>OLD BLOCK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>168</td>
<td>214</td>
<td>233</td>
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<tr>
<td>Prof. MVN</td>
<td>22</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Dr. RHG</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Dr. VTR</td>
<td>18</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Dr. SS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dr. RS</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Dr. NRU</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
<td>6</td>
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</table>

Ortho Trauma Ward 205 22
(All Units)

Grand Total 329
In an logical extension of the golden hour concept in trauma, an innovative endeavour - aptly named "The Golden Day Trauma Care Programme" was conceived and introduced. This programme came to effect on 28th July, 2008. Under this new endeavour, patients with closed fractures admitted in Emergency Trauma Ward (Ortho) will be operated within 24 hours as is being done in private and corporate hospitals. Similarly, patients with open fractures will be operated upon on the same day. This programme has successfully catered to 484 patients till date.
I. OPD (Out Patient Department)

The number of outpatients attending our orthopaedic department has been increasing over years.

<table>
<thead>
<tr>
<th>MONTH</th>
<th>MALE</th>
<th>FEMALE</th>
<th>CHILDRENS MALE</th>
<th>CHILDRENS FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2008</td>
<td>2599</td>
<td>3286</td>
<td>21</td>
<td>8</td>
<td>5914</td>
</tr>
<tr>
<td>May</td>
<td>2494</td>
<td>3175</td>
<td>27</td>
<td>13</td>
<td>5109</td>
</tr>
<tr>
<td>June</td>
<td>2418</td>
<td>3243</td>
<td>18</td>
<td>18</td>
<td>5697</td>
</tr>
<tr>
<td>July</td>
<td>2806</td>
<td>2882</td>
<td>18</td>
<td>11</td>
<td>5717</td>
</tr>
<tr>
<td>August</td>
<td>2617</td>
<td>3247</td>
<td>28</td>
<td>11</td>
<td>5903</td>
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<tr>
<td>September</td>
<td>2671</td>
<td>3431</td>
<td>22</td>
<td>10</td>
<td>6134</td>
</tr>
<tr>
<td>October</td>
<td>2200</td>
<td>2795</td>
<td>18</td>
<td>11</td>
<td>5024</td>
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<tr>
<td>November</td>
<td>2345</td>
<td>2887</td>
<td>21</td>
<td>8</td>
<td>5261</td>
</tr>
<tr>
<td>December</td>
<td>2322</td>
<td>3053</td>
<td>18</td>
<td>9</td>
<td>5402</td>
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<tr>
<td>January 2009</td>
<td>2516</td>
<td>3167</td>
<td>18</td>
<td>12</td>
<td>5713</td>
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<td>2967</td>
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<td>March</td>
<td>3100</td>
<td>3831</td>
<td>15</td>
<td>8</td>
<td>6954</td>
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</tbody>
</table>

- On an average, 400 patients attended the OPD services every day between 7.30 am and 12 noon
II. OP ADMISSION & TRAUMA WARD ADMISSION

The number of inpatients admitted during the period between April 2008 & March 2009 is tabulated here.

<table>
<thead>
<tr>
<th>Month</th>
<th>OP Admission</th>
<th>Trauma Ward Admission</th>
<th>Total Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2008</td>
<td>358</td>
<td>361</td>
<td>719</td>
</tr>
<tr>
<td>May</td>
<td>470</td>
<td>389</td>
<td>859</td>
</tr>
<tr>
<td>June</td>
<td>309</td>
<td>394</td>
<td>703</td>
</tr>
<tr>
<td>July</td>
<td>342</td>
<td>340</td>
<td>682</td>
</tr>
<tr>
<td>August</td>
<td>398</td>
<td>401</td>
<td>799</td>
</tr>
<tr>
<td>September</td>
<td>464</td>
<td>396</td>
<td>860</td>
</tr>
<tr>
<td>October</td>
<td>486</td>
<td>399</td>
<td>885</td>
</tr>
<tr>
<td>November</td>
<td>290</td>
<td>301</td>
<td>591</td>
</tr>
<tr>
<td>December</td>
<td>321</td>
<td>341</td>
<td>662</td>
</tr>
<tr>
<td>January 2009</td>
<td>236</td>
<td>308</td>
<td>544</td>
</tr>
<tr>
<td>February</td>
<td>251</td>
<td>300</td>
<td>551</td>
</tr>
<tr>
<td>March</td>
<td>185</td>
<td>276</td>
<td>461</td>
</tr>
</tbody>
</table>

- **On an average, 8 patients are admitted every day in the OPD.**
- **12 - 15 Patients are admitted in Ortho Trauma Ward every day.**
III. ORTHOPAEDIC SURGERY - OPERATION THEATRE STATISTICS

<table>
<thead>
<tr>
<th>MONTH</th>
<th>Elective (OT)</th>
<th>Emergency (OT)</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Major</td>
<td>Minor</td>
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<tr>
<td>April 2008</td>
<td>90</td>
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<td>May</td>
<td>123</td>
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<td>June</td>
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<td>279</td>
</tr>
<tr>
<td>July</td>
<td>135</td>
<td>116</td>
<td>461</td>
</tr>
<tr>
<td>August</td>
<td>129</td>
<td>89</td>
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<tr>
<td>September</td>
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<td>62</td>
<td>296</td>
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<tr>
<td>February</td>
<td>62</td>
<td>52</td>
<td>295</td>
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<tr>
<td>March</td>
<td>104</td>
<td>49</td>
<td>301</td>
</tr>
</tbody>
</table>

- The number of elective surgeries has been on an average of 6 - 8 per day.

- In the 24 hours emergency OT: the average number of surgeries done per day is 8-10 surgeries.
## IV. PAY WARD

### Pay Ward Statistics

<table>
<thead>
<tr>
<th>MONTH</th>
<th>TOTAL ADMISSION</th>
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<tr>
<td>May</td>
<td>23</td>
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<tr>
<td>June</td>
<td>45</td>
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<td>July</td>
<td>55</td>
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<tr>
<td>August</td>
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<td>September</td>
<td>47</td>
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<td>October</td>
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<td>November</td>
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<tr>
<td>December</td>
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<td>January 2009</td>
<td>72</td>
</tr>
<tr>
<td>February</td>
<td>59</td>
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<tr>
<td>March</td>
<td>88</td>
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</table>

![Graph showing Pay Ward Statistics](chart.png)
### DEPARTMENT OF PHYSIOTHERAPY

#### 1st APRIL 2008 - 31st MARCH 2009

<table>
<thead>
<tr>
<th>Months</th>
<th>Out-Patients</th>
<th>In-Patients</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New</td>
<td>Old</td>
<td>Total</td>
</tr>
<tr>
<td>April 2008</td>
<td>809</td>
<td>4894</td>
<td>5703</td>
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<tr>
<td>May 2008</td>
<td>921</td>
<td>4829</td>
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<tr>
<td>June 2008</td>
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<td>6470</td>
</tr>
<tr>
<td>July 2008</td>
<td>1097</td>
<td>6317</td>
<td>7414</td>
</tr>
<tr>
<td>Aug 2008</td>
<td>1036</td>
<td>5466</td>
<td>6502</td>
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<tr>
<td>Sep 2008</td>
<td>1181</td>
<td>5198</td>
<td>6379</td>
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<td>Oct 2008</td>
<td>931</td>
<td>4139</td>
<td>5070</td>
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<td>Nov 2008</td>
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<td>5065</td>
<td>6079</td>
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<tr>
<td>Dec 2008</td>
<td>1035</td>
<td>4740</td>
<td>5775</td>
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<tr>
<td>Jan 2009</td>
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<td>6228</td>
</tr>
<tr>
<td>Feb 2009</td>
<td>1215</td>
<td>5982</td>
<td>7197</td>
</tr>
<tr>
<td>Mar 2009</td>
<td>1294</td>
<td>5974</td>
<td>7268</td>
</tr>
<tr>
<td>TOTAL</td>
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![Graphs showing monthly patient counts](image)
ACCOLADES FOR Prof. MAYIL VAHANAN NATARAJAN

- In January 2009, the oldest university of the country, The Madras University conferred on Prof. Mayil Vahanan Natarajan the Doctorate of Science (Honoris Causa) for his services to the common man attending the public hospital. He received the award from His Excellency Surjit Singh Barnala, Governor of Tamil Nadu.

- In February 2009, Prof. Mayil Vahanan Natarajan received the Wockhardt Award for Excellence in the field of Orthopaedics. The awardees are nominated by their peers and their selection is validated by a select panel from Harvard Medical International, Boston, USA. The award was presented to Prof. Mayil Vahanan Natarajan by Habil Khorakiwala in Mumbai, India.

- Prof. Mayil Vahanan Natarajan has been chosen by the Royal College of Surgeons, England for the conferment of the prestigious FRCS. This fellowship is awarded Ad Eundem thus recognising his academic excellence and professional diligence. The degree is to be awarded in a ceremony in July 2009.

I am very pleased to inform you that the Council of the College approved your award of the Fellowship ad eundem at its meeting on 11 December 2008. On behalf of the President and members of Council, may I welcome you to the Fellowship, at the start of a continuing association with the College.
Oration

- Shekar Saibal Ghosh Oration on “Complications of Custom Mega Prosthesis and uses of Custom Mega Prosthesis in Rare Sites” at the 53rd Annual Conference of the Indian Orthopaedic Association, Bangalore, 6th December 2008.

Papers presented in International Conferences

- Recent Advances in Osteosarcoma - 12th G.C.C. / 13th Pan Arab Orthopaedic Congress - Muscat - OMAN (Nov. 2008).

Papers presented in National Conferences

- Prosthetic Replacement in Bone Tumours - Annual Conference of the Orthopaedic Association of South Indian States (OASIS), Hotel Sunway GRT Grand, Pondicherry - 23rd August, 2008.
ACADEMIC ACTIVITIES OF DR. R.H. GOVARDHAN

Dr. R.H. Govardhan, Additional Prof. of Orthopaedic Surgery served as the Secretary of the Indian Orthopaedic Association till December 2008 for a period of 3 years from Dec. 2006.

He was awarded IOSUK senior fellowship for a period of 2 weeks to visit centres of excellence in UK and allowed to participate in summer meeting of BOA.

Papers presented in International Conferences


Papers presented in National Conferences

- **Paediatric Distal Radius Fractures** - CME program of the Lakeshore Hospital, Cochin, August 2008.
- **4 part Fractures of Upper Humerus - ifx or Replace - Debate** - Dr. KT Dholakia Memorial CME lecture during IOACON 2008 in Bangalore.
- **Extension Contracture Knee** - IOACON 2008, Bangalore.
- **Management of Paediatric Post Osteomyelitic Sequelae** - IOACON 2008, Bangalore.
Academic Activities of Dr. V. Thulasiraman

- He was the President of Madras Orthopaedic Society from 1.4.2008 - 31.3.2009.
- Presented a paper on **Custom Mega Prosthesis in Bone Tumours** - Kozhikode Orthopaedic Society, Calicut, *July 2008*.

Academic Activities of Dr. S. Subbiah

- Scientific oral presentation on **Impact of Soft Tissue on Functional Outcome of**

Academic Activities of Dr. Nalli R. Yuvaraj

- **Training on Organisation of Trauma Care System**: Nominated by Government of India, Ministry of Health and Family Planning and Ministry of External Affairs, Government of Israel.

The training was held at Rambam Medical Centre, Haita, Israel between 15-27 March, 2009.
The first ever MOU signing under Public-Private-Partnership (PPP) was done between Dept. of Orthopaedic Surgery (GGH) / Govt. of Tamil Nadu and Depuy Johnson & Johnson Ltd., on 9.9.2008. This is the first of its kind in the State Government Hospital. Under this agreement, a sum of 23.75 lakh rupees was allotted for the establishment of ORTHO SKILLS LAB in GGH.

The event was graced by Hon’ble Minister for Health, Thiru M.R.K. Paneerselvam, Health Secretary Thiru V.K. Subburaj, Prof. Mayil Vahanan Natarajan, Mr. Subbiah. This event won accolades from personnel of both medical & non-medical fields.
The Ortho Skills Lab in the Department of Orthopaedic Surgery was inaugurated on 10-2-2009 by Hon’ble Minister for Health Thiru M.R.K. Paneerselvam, the event was graced by Thiru V.K. Subburaj and the past and present heads of our Department.

The day would also be remembered for the live demo and CME on "Computer Navigation Assisted TKR" by Dr. Rajesh Maniar, Consultant, Orthopaedic Surgery, Mumbai. Prior to the live demo, there was a CME and lecture along with a panel discussion on CA-TKR in Seminar Hall, 3rd Floor, Block I.

After the live demo, there was a hands-on bone model workshop on TKR which was demonstrated by Dr. Rajasekara Reddy.
The Department of Orthopaedic Surgery received the recognition for conducting research leading to the Award of Ph.D. Degree from the Tamil Nadu Dr. M.G.R. Medical University in August 2008 (Proc. No. AC - 1 (1) 34609) 2007 dt. 4.8.2008.

The Vice-Chancellor is pleased to issue orders recognizing the Department of Orthopaedics at Madras Medical College, Chennai, for the purpose of conducting research leading to the award of Ph.D. degree in this University.
The Institutional Ethics Committee of the Tamil Nadu Dr. M.G.R. Medical University approved for Department of Orthopaedic Government General Hospital for conduct of the Research “Autoologous Adult Stem Cell Therapy for Spinal Cord Damage”. This academic tie-up was approved on 28-4-2008 with Dr. Sivakumar - Department of Experimental Medicine at Tamil Nadu Dr. M.G.R. Medical University as the Principal Investigator and Prof. Mayil Vahanan Natarajan as the Co-investigator.
Each year, our Department receives around 4500 trauma patients from various Districts of Tamil Nadu. These trauma patients are typically the bread winners of their families.

The Government is providing funds for procuring implants for patients attending our Department. At times the quantum of funds may not be sufficient to meet out the enormous needs.

In order to supplement the efforts of the Government and following in the same lines as the Bone Bank and the Blood Bank, a first of its kind. "Implant Bank" was conceived and established in Department of Orthopaedic Surgery, Govt. General Hospital.

**ABSTRACT**

Establishment of Orthopaedic Implant Bank in the Department of Orthopaedic Surgery, Government General Hospital, Chennai - Orders - Issued.

G.O.(Ms.)No 100

Dated 18.3.2009

Thiruvalluvar Aandu 2040 - Pang

Read:

i) From the Head of the Department, Department of Orthopaedic Surgery and Traumatology, Government General Hospital, Chennai letter No. 29816/P&D/08, dated 15.10.2008

ii) From the Deputy Director of Medical Education Letter No. 100373/P&D1/1/08, dated 6.02.09.

The Government permit the Head of Department of Orthopaedic Surgery and Traumatology, Government General Hospital, Chennai to open an Orthopaedic Implant Bank in the Department of Orthopaedic Surgery, Government General Hospital, Chennai.
The Government of Tamil Nadu has recognised the unparalleled success and developments in the Department of Orthopaedic Surgery in the recent years under the leadership of Prof. Mayil Vahanan Natarajan. To expand the scope of services of the Department, the Government of Tamil Nadu has requested the Department to take over one of the Peripheral Hospitals in Chennai and convert it into an Orthopaedic Speciality Hospital. This will enable effective Orthopaedic Services to reach each and every corner of the City.

To inspect all these Peripheral Hospitals and to suggest ways and means for using one of the hospitals as the Orthopaedic Speciality Hospital in Chennai. Additional infrastructure and equipments requirement and manpower requirement including budget may be recommended.
With the ever increasing number of patients requiring Orthopaedic Care and an exponential growth of the speciality in the last decade, it has been increasingly difficult to keep pace with development with the existing equipments and manpower. In this Bone and Joint Decade, with a view to increase the number of trained Orthopaedic Specialists to cater the needs of the people, it has been proposed to increase the number of Post Graduate Seats to 12.

A proposal to increase the M.S. (Orth) Degree seats from 6 to 12 has been submitted on 31.3.2009 to Directorate of Medical Education.
The number of patients benefiting from our OPD and Trauma services has increased dramatically over the last five years. The 24 hours emergency trauma and emergency operation theatre are functioning round the clock, 24 hours, 365 days a year. The Department is also abreast with the latest in orthopaedic techniques as is evident in wide variety of surgeries being performed like fracture fixation, Total Hip and Knee Replacements, Tumour Surgeries, Ilizarov Reconstruction and Spinal Surgeries. Also during the last academic year the Department of Orthopaedic Surgery has been recognised for research (Ph.D. and Autologous stem cell research).

The Implant Bank has also catered to many patients since its inception during the last academic year. The Ortho Skills Lab inaugurated in Feb. 2009 has introduced monthly hands on training sessions for the post-graduates. With the Bone Bank operational in full potential the number of allografts used in orthopaedic surgery has increased three fold during the last year.

These developments serve as a forefront for this Department of Orthopaedic Surgery to be upgraded as an Institute of Orthopaedic Surgery. This will be the forerunner for the development of the Institute of Orthopaedic Surgery in the lines of the Institute of Ophthalmology and Institute of Obstetrics & Gynaecology. The sub-specialities like spine have already been made a separate speciality branch of Orthopaedic Surgery. Similarly the Institute of Orthopaedics will be the parent speciality giving birth to the sub-specialities of Arthroplasty, Arthroscopy and Orthopaedic Oncology in the next fifty years.
The Dr. K.T. Dholakhia CME programme during IOACON 2008 at Bangaluru was convened by Prof. Mayil Vahanan Natarajan, Dr. R.H. Govardhan. Dr. R. Selvaraj was the organising secretary. The National Level CME was attended by 2500 delegates.

Best Resident Award (BOS)

The Bombay Orthopaedic Society conducted ALL INDIA BEST RESIDENT AWARD. It consisted of online screening examination and clinical examination for selected candidates. Dr. I. Geethan and Dr. Syed Naser were among the top ten candidates and were selected for clinical examination. Dr. I. Geethan was awarded the 3rd rank and Dr. Syed Naser was placed 5th in the examination. He was awarded a certificate, trophy and cash award.

Prof. C. Vyageswaradu Gold Medal

Dr. Navin Balasubramanian received the Prof. C. Vyageswaradu Gold Medal for his presentation titled “Endoprosthetic Reconstruction using total Femoral Custom Prosthesis” in TNOACON 2008, Kodaikanal.

He has also received the MOS award for Excellence in the annual MOS meet in April 2009 for his academic achievements in 2008 - 2009.

PUBLICATIONS IN INTERNATIONAL JOURNALS

International Orthopaedics (SICOT)

- Endoprosthetic replacement in distal radial tumours
  - Prof. Mayil Vahanan Natarajan, Dr. J.C. Bose, Dr. J. Viswanath, Dr. B. Navin, Dr. Sameer

- Endoprosthetic reconstruction using total femoral Custom Mega Prosthesis in malignant bone tumours
  - Prof. Mayil Vahanan Natarajan, Dr. Navin, Dr. J. Viswanath, Dr. Sameer

NATIONAL JOURNALS (Indian Journal of Orthopaedics) IJO

- Giant Cell Tumours around the knee treated with wide resection and Custom Mega Prosthesis - along term study.
  - Prof. Mayil Vahanan Natarajan, Dr. Ayyappan, Dr. R. Prabhakar, Dr. Sameer (2008)
1. **Basic Fracture Fixation** course was conducted in MMC & GGH on July 19th & 20th, 2008. Venue was 3rd & 5th Seminar Halls in tower block I, MMC. 75 orthopaedic postgraduate delegates from various parts of Tamilnadu attended the course. Hands on training in bone modules was given for basic fracture fixation, like dynamic hip screw fixation, pelvic and acetabulum fixation, spine fixation, tension band wiring, external fixation, plates and screw fixation.

Demonstration for interlocking nailing and hemiarthroplasty were conducted. Lectures about various topics like fracture healing, lag screw fixation, tension band wiring, hemiarthroplasty, external fixation, cannulated screw fixation, pelvic injuries, acetabulum fractures, interlocking nailing were taken by renowned faculties.

2. The **CME workshop in Orthopaedics for the DNB students** from various institutions in South India, was conducted from 1.8.2008 to 3.8.2008 by the Department of Orthopaedic Surgery, Madras Medical College, Govt. General Hospital at the Conference Hall in the III Floor of the Tower Block I. The programme was organised, such that the full range of long and short cases were discussed by eminent faculties on 1.8.2008 and 2.8.2008. Ward rounds and sessions on instruments, X-rays, MRI, pathology discussion were conducted on the last two days.

3. Condolence meeting was organized to Dr. T.K. Shanmugasundaram, Emeritus Professor of Orthopaedic Surgery, Madras Medical College on 16.8.2008.
4. The Eleventh **Lt. Col. Dr. V.R. Thayumanaswamy Memorial Oration** on 25th October 2008. The oration was delivered by **Prof. K. Sriram**, Former Head, Department of Orthopaedic Surgery. The oration was on “**Evolution of the Treatment of Idiopathic Scoliosis**”.

5. **Mrs. Janaki Natarajan Gold Medal** Examination was conducted on 17.11.2008. The medal was shared by **Dr. S. Manoh** and **Dr. S. Syed Naser**, D.Orth. students.

6. **Lt. Col. V.R. Thayumanaswamy prize examination** was conducted on 24.11.2008 and was awarded to **K. Arun Jinal**, Final M.B.B.S. student of MMC.

7. On 9.8.2008, Dr. Pradeep Kumar, M.B.B.S., MRCP, Consultant Rheumatologist, Perth Royal Infirmary, UK gave a lecture about Recent Advances in the Management of Rheumatoid Arthritis. He discussed about the current concepts pathology, investigations and Management of Rheumatoid Arthritis. He was introduced by Dr. Jaheer Hussain and felicitated by Dr. Selvaraj, Assistant Professor of Orthopaedic Surgery, Madras Medical College & Government General Hospital, Chennai - 3.

8. One day Ethiskills Ortho Course has been organized for Dept. of Ortho Surgeons, Post Graduates.

9. Condolence meeting for **Prof. Xavier**, Former Head of the Department and **Dr. C.T. Mannar**, Former Lecturer in the Department was held in January 2009.


4. Dr. S. Senthil Sailesh, M.S. Ortho joined as Senior Resident in Orthopaedics on 1.7.2008.

5. Dr. R.A. Shashidhar, Tutor, Institute of Forensic Medicine, Madras Medical College is deputed to work in Orthopaedic Department with effect from 1.7.2008.

6. Dr. R. Prabhakar, Tutor in Casualty, Kilpauk Medical College was transferred and posted as Senior Resident in Orthopaedics, Government General Hospital, Chennai on the forenoon of 1.8.2008 till 13.11.2008.

7. Dr. S. Subbiah joined as Additional Professor of Orthopaedic Surgery on 26.8.2008.

8. Dr. R. Selvaraj, Asst. Professor was redesignated as Reader in Orthopaedics from 15.5.2007.
The Robert Roaf and IOA Johnson & Johnson Travelling Fellows are a select few who are sponsored by IOA for a 4 week travelling fellowship programme during the month of December each year. They visit hospitals across the country in major cities and observe the work ethics and surgical progress of the hospitals across the country.


22.12.08 (Monday) Visited Sri Ramachandra Medical College
Observed the Surgery
– Total Hip Arthroplasty

23.12.08 (Tuesday) Visited Sundaram Medical Foundation
Demonstration of the cases of Total Knee Replacement
– Dr. Jayashankar - Dr. Sudhakar Williams

24.12.08 (Wednesday) Visited Apollo Hospital
Defaulty Correction in Scoliosis
– Dr. Sajjan Hegde - Dr. Appaji
Academic Sessions with Dr. Suryanarayanan

25.12.08 (Thursday) Trip to Mahabalipuram

26.12.08 (Friday) Visited Government General Hospital
Observed the Surgery
a) Custom Mega Prosthesis - Distal Femur Osteosarcoma
b) Caries Spine
c) Total Hip Replacement
d) Resection and Ilizarov fixation for Distal Tibial Osteosarcoma

Academic Presentations
Bone Banking - Dr. Anjan Ramachandranath
Limb Salvage by Custom Mega Prosthesis -
– Dr. Navin Balasubramanian
Global stabilisation in Dorsal Spine Fractures - Dr. Rajasekar

**J & J TRAVELLING FELLOWS DETAILS**

1. Dr. Amite Pankaj, M.S. (Orth.)
   Consultant Orthopaedic Surgeon
   University of Medical Sciences
   New Delhi

2. Dr. Manish Kumar, M.S. (Orth.)
   Senior Resident
   AIIMS, New Delhi

3. Dr. Vivek, M.S. (Orth.)
   Consultant Orthopaedic Surgeon
   AIIMS, New Delhi

4. Dr. Om Prakash Lakhwani, M.S. (Orth.)
   Consultant Orthopaedic Surgeon
   Rewar, Madhya Pradesh
The Bone Bank was established in the Government General Hospital on 1st July, 2006. It is well equipped with ETO sterilizer, deep freezer, besides other basic infrastructure facilities. The field of activities include motivation of potential donors, screening them, obtaining consent, collection, processing and preservation of grafts.

Cancellous allografts so obtained are used for filling bone defects in complex fracture surgeries, revision arthroplasty and tumour surgery. Structural allografts imported from Sri Lanka human tissue bank are stored and used for complex bone tumour surgeries.

Till date 26 such cadaveric structural allograft surgeries have been performed, 144 live donor grafts have been obtained, 130 of them processed and 94 used in 61 patients. We now have 36 cancellous allografts in store. Procedures are on line to procure structural cadaveric allografts from voluntary donors to match the demand.

Living Donor Grafts:

1. Number of Grafts Obtained
   a) Processed 150
   b) Used 106
   c) Available 44

2. Number of Cancellous allograft surgeries done 36
PRESENTATIONS IN
MADRAS ORTHOPAEDIC SOCIETY MEETINGS

Dr. P.S. Elangovan, M.S. A rare case of bilateral ankle swelling for discussion
Dr. S. Rajasekaran Quadriplegisis - an interesting case for Management
Dr. Dhanesh Prasad Management of proximal femur deformity
Dr. Navin Balasubramanian Single stage global stabilization in complex, cervical fractures - Our experience - Best paper
Prof. V.T.R. Unit

Dr. B. Pasupathy PG Quiz
Dr. J. Viswanath - Difficulties of THR in a dysplastic hip - Best paper
Prof. R.H.G. unit
Dr. S. Rajasekaran,
Dr. Subbiah - Prof. V.T.R. Unit An interesting case of cervical spine disease
Dr. Sarath Babu Management of spondylolisthesis by K-fixation system
Dr. Raj Ganesh Treatment of post-osteomyelitis sequela by Ilizarov.

PAPER / POSTER PRESENTATIONS IN
ANNUAL CONFERENCE
IOACON 2008, BANGALURU - DEC. 2008

Oral Presentations
1. Challenges and solutions to paediatric post-osteomyelitic sequela
   Dr. C. Dhanesh Prasad
2. Endoprosthetic reconstruction using total femoral custom mega prosthesis in malignant bone tumours
   Dr. Navin Balasubramanian
3. Distal radial tumours treated with custom mega prosthetic replacement
   Dr. J. Viswanath
4. Outcome of soft tissue injuries in # dislocations
   Dr. I. Geethan

Poster Presentations
1. Lesions of navicular bone
   Dr. I. Geethan
PAPER / POSTER PRESENTATIONS
IN ANNUAL OASISCON 2008

Puducherry (Orthopaedic Association of South Indian States Conference)

Poster Presentations
1. Outcome after lisfranc joint fracture dislocation

Authors
Prof. Mayil Vahanan Natarajan
Dr. R. Selvaraj
Presenter: Dr. I. Geethan

Best Poster Award

ANNUAL TAMIL NADU ORTHOPAEDIC
ASSOCIATION CONFERENCE
TNOACON 2009 - COIMBATORE

Oral Paper Presentations
1. Endoprosthetic reconstruction using proximal femoral custom mega prosthesis in complex femoral fractures
Dr. Navin Balasubramanian

2. Long term functional analysis of endoprosthetic reconstruction for justa articula bone tumours around the knee
Dr. J. Viswanath

3. Challenges and solutions to paediatric post-osteomorphic sequelaes
Dr. Raj Ganesh

4. Articular surface replacement - A case series
Dr. Sarath Babu

5. Management of complex ankle dislocations
A case series
Dr. Padmarajan

6. Global fixation for dorso lumbar spine fractures
A case series
Dr. Rajasekaran

Poster Presentations
1. Outcome of soft tissue injuries in Lisfranc # dislocations
Dr. Ashok