## Trends in the Baseline Characteristics of Patients Referred to Myocardial Perfusion Imaging Between the Years 2000-2008

Mazor Dray, E; Margulis, G; Kidman, G; Basevitch, R; Ilia, R; Wolak, A
Soroka University Medical Center, Beer Sheva, Israel

Background: Over the last decade, the variety of imaging modalities has increased. We sought to investigate the impact of this change on the characteristics of patients referred to myocardial perfusion imaging (MPI).
Methods: Using the heart institute computerized database we identified all consecutive MPI studies between January 2000 and October 2008. Demographic, clinical and MPI data were extracted. Proportions were compared using crosstabs and chi-square statistics. To assess the associations between multiple variables ANOVA was used. The level of significance was 0.05 . Results: We identified 36456 studies. Table 1 shows the baseline characteristics over the years. There was a significant but not clinically relevant trend in patients' age, male ratio and history of CAD. However, the rate of patients with 0-1 risk factors had declined dramatically while the rate of patients with 2-3 and 3-4 risk factors inclined. Similar trends were demonstrated for patients with no history of CAD ( $n=19102$ ).
Conclusions: The profile of patients referred to MPI has changed significantly. This trend might reflect improvement in the selection of patients referred to MPI (intermediate risk) and impact of alternative imaging modalities.

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age (Mean $\pm$ SD) | $63 \pm 11.3$ | $63.5 \pm 11.4$ | $64.1 \pm 11.4$ | $64.3 \pm 11.6$ | $64.4 \pm 11.5$ | $64.2 \pm 11.7$ | $64.1 \pm 11.6$ | $64.7 \pm 12.0$ | $64.7 \pm 11.5$ | p<0.05 |
| Male n (\%) | $\begin{aligned} & 2132 \\ & (59.5 \%) \end{aligned}$ | $\begin{aligned} & 2370 \\ & (59.9 \%) \end{aligned}$ | $\begin{aligned} & 2221 \\ & (58.3 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2261 \\ & (59.9 \%) \end{aligned}$ | $\begin{array}{\|l} 2344 \\ (62.9 \%) \end{array}$ | $\begin{aligned} & 2686 \\ & (57.8 \%) \end{aligned}$ | $\begin{aligned} & 2932 \\ & (58.5 \%) \end{aligned}$ | $\begin{aligned} & 2763 \\ & (60.0 \%) \end{aligned}$ | $\begin{aligned} & 1986 \\ & (59.7 \%) \end{aligned}$ | p<0.05 |
| $\begin{array}{\|l\|} \hline R F \\ (\#) \\ 0-1 \end{array}$ | $\begin{aligned} & 1750 \\ & (48.8 \%) \end{aligned}$ | $\begin{aligned} & 1502 \\ & (37.9 \%) \end{aligned}$ | $\begin{aligned} & 1175 \\ & (30.8 \%) \end{aligned}$ | $\begin{aligned} & 967 \\ & (25.6 \%) \end{aligned}$ | $\begin{aligned} & 866 \\ & (23.2 \%) \end{aligned}$ | $\begin{aligned} & 962 \\ & (20.7 \%) \end{aligned}$ | $\begin{aligned} & 1012 \\ & (20.2 \%) \end{aligned}$ | $\begin{aligned} & 781 \\ & (17.0 \%) \end{aligned}$ | $\begin{aligned} & 535 \\ & (16.1 \%) \end{aligned}$ | p<0.05 |
| $\begin{aligned} & \mathrm{RF} \\ & (\#) \\ & 2-3 \end{aligned}$ | $\begin{aligned} & 1552 \\ & (43.3 \%) \end{aligned}$ | $\begin{aligned} & 2114 \\ & (53.4 \%) \end{aligned}$ | $\begin{aligned} & 2173 \\ & \text { (57.0\%) } \end{aligned}$ | $\begin{aligned} & 2281 \\ & (60.4 \%) \end{aligned}$ | $\begin{aligned} & 2316 \\ & (62.1 \%) \end{aligned}$ | $\begin{aligned} & 2868 \\ & (61.7 \%) \end{aligned}$ | $\begin{aligned} & 2988 \\ & (59.7 \%) \end{aligned}$ | $\begin{aligned} & 2836 \\ & (61.6 \%) \end{aligned}$ | $\begin{aligned} & 1964 \\ & (59.0 \%) \end{aligned}$ | p<0.05 |
| $\begin{aligned} & \text { RF } \\ & \text { (\#) } \\ & 4-5 \end{aligned}$ | $\begin{aligned} & 284 \\ & (7.9 \%) \end{aligned}$ | $\begin{aligned} & 343 \\ & (8.7 \%) \end{aligned}$ | $\begin{aligned} & 463 \\ & (12.1 \%) \end{aligned}$ | $\begin{aligned} & 528 \\ & (14.0 \%) \end{aligned}$ | $\begin{aligned} & 550 \\ & (14.7 \%) \end{aligned}$ | $\begin{aligned} & 821 \\ & (17.7 \%) \end{aligned}$ | $\begin{aligned} & 1008 \\ & (20.1 \%) \end{aligned}$ | $\begin{aligned} & 988 \\ & (21.5 \%) \end{aligned}$ | $\begin{aligned} & 829 \\ & (24.9 \%) \end{aligned}$ | p<0.05 |
| Hx of CAD <br> n (\%) | $\begin{aligned} & 1887 \\ & (52.6 \%) \end{aligned}$ | $\begin{aligned} & 1877 \\ & (47.4 \%) \end{aligned}$ | $\begin{aligned} & 1805 \\ & (47.4 \%) \end{aligned}$ | $\begin{aligned} & 1771 \\ & (46.9 \%) \end{aligned}$ | $\begin{aligned} & 1755 \\ & (47.0 \%) \end{aligned}$ | $\begin{aligned} & 2190 \\ & (47.1 \%) \end{aligned}$ | $\begin{aligned} & 2329 \\ & (46.5 \%) \end{aligned}$ | $\begin{aligned} & 2161 \\ & (46.9 \%) \end{aligned}$ | $\begin{aligned} & 1579 \\ & (47.4 \%) \end{aligned}$ | p<0.05 |

