



London Marathon Race day.

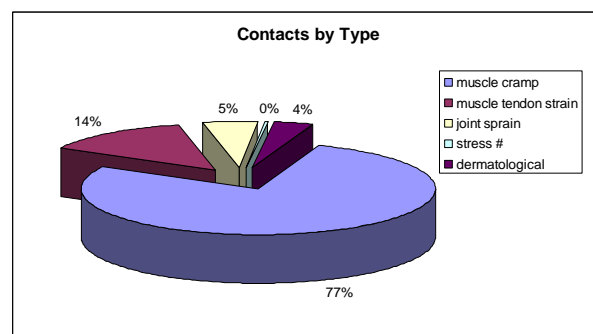
Having been a runner and physiotherapist for many years, I have not only completed a number of London Marathons but have also been a medical volunteer providing race day assistance to runners. This has given me the opportunity to study the type of injuries and medical contact rates experienced during this very special race.

There is a great deal of research out there discussing running injuries in general, however much less has been studied in direct relation to marathon race day. What has been reported including the work of Roberts (2000) at the Twin Cities Marathon (USA) and of the former London marathon medical director Dr Tunstall Pedoe has largely focussed upon the more serious medical complications faced. Few studies to date have addressed the musculoskeletal problems experienced during and immediately after the marathon.

The Flora London Marathon is a unique and great event with over 130,000 applicants in 2005 and a regular field of 35,000 runners over the last few years. This includes runners of all ability from the elite of world running to the first timer. Many run for charity and in 2000 this figure topped 70% of all runners, a truly remarkable number. On race day there are over 100 volunteer physiotherapists, under the management of Chief Physiotherapist Susie Jones, to provide treatment and advice to runners. They are stationed throughout the 2nd half of the course, on the sweep bus and in the medical and specialist tents at the finish working closely with the numerous St Johns first aid staff, Dr's and podiatrists who also volunteer on the day.

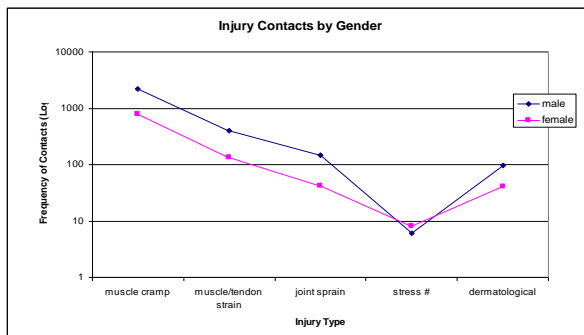
As a runner preparing for the marathon many thoughts and questions pop up. These may include the likelihood of experiencing injuries before the race and also what may happen on race day. Reassuringly by far the majority of entrants finish. In 2007, of 36,396 registered entrants there were 35,700 recorded finishers and a number of those missing would not have started.

Of the 36,396 registered starters there were almost 4000 (3892) contacts made with physiotherapists, the majority of which were for musculoskeletal problems. A small number were for skin problems, although these were more frequently managed by the podiatry team. By far the majority of contacts were for muscle cramp accounting for 77% of the total while muscle/tendon strains accounted for 14%.



As expected the thigh and calf were the predominant areas for problems with the knee surprisingly only representing 4% of all complaints. This is significantly less than reported for general endurance running training.

Not surprising, at least to female runners, male runners were found to be significantly more likely to seek help. This was reflected with a higher rate of calf and hamstring cramp as well as iliotibial band (runners knee) strain in men.



As for when problems affect runners, it was found that many more contacts were made during the race than at the finish. Out of the total contacts made

with physiotherapists just over 63% of these were reported during with the remaining 37% of contacts made after crossing the line. This may partly relate to the influence of motivation to finish and the emotion and relief experienced when finally crossing the line.

Interestingly there was a large cluster of contacts recorded around the 20 mile mark which may lend some support to the concept of 'the wall'. This corresponds with a study by Stephenson and Biddle (1998) who found that in the London marathon a group of amateur charity runners subjectively reported experiencing physical difficulties at this same stage.

Overall the contact rates may seem quite high although severity levels are not accounted for and many of these were just the transient effects of subjecting your body to running mile after mile on race day. It is also less surprising when we look at one large study in Australia where Satterthwaite et al (1999) found over 90% of runners reported some form of specific health problem associated with marathon race day in Auckland.

The medical director of the London Marathon has over the years developed a great support team for the thousands of runners, and physiotherapists play a large role within that. The London Marathon is a unique event and as our understanding of the types of problems experienced by entrants grows so this support will continue to develop. Unfortunately these findings do not account for the many physiotherapists working with charities and individuals on race day who also do a great job in supporting runners achieve their goal.

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C-SHEM and CHASES offer a range of services for runners of all abilities.