

Obesity management in boys with severe haemophilia: What works?

Nicola Hamilton¹, Chris Barnes^{1,2,3}

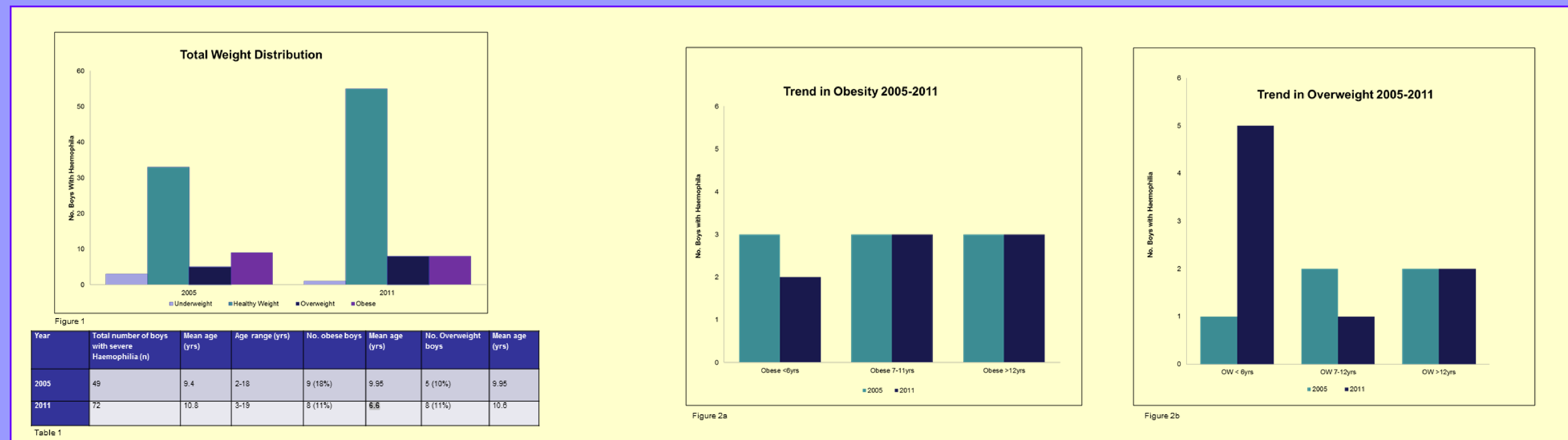
¹Royal Children's Hospital, Melbourne ²Murdoch Childrens Research Institute, Melbourne ³The University of Melbourne, Melbourne

Objectives:

Investigate number of obese boys and current obesity management in severe haemophilia. Obesity is a concern in the child/adolescent population. In the Haemophilia population, maintaining joint health is vital, as excess body adiposity can reduce movement in weight bearing joints, increase difficulty in venous access and amount of clotting factor for prophylaxis, and hence rise in health dollar.

Methods:

Clinical chart review of boys with severe haemophilia in 2005 and 2011 was undertaken at a paediatric tertiary care hospital. Severe haemophilia: normal factor activity in blood <1%. BMI calculated using 2000 CDC growth charts (USA) (kg/m²) with overweight>85th percentile, obese>95 percentile. If overweight/obese, boys and families received weight loss management by their consultant.



Results:

Severe haemophilia was identified in 72 boys (mean 10.8yrs, range 3-19) in 2011 and in 49 (mean age 9.4, range 2-18) in 2005. Comparison of 2011 to 2005 data indicates that there was a continuing rise in BMI in the population of boys with haemophilia (Figure 1). In 2011 the number of boys with a BMI > 85th was 16 (11.52%) compared to 14 (6.68%) in 2005.

Although the total number of obese boys was less in 2011 (8 compared to 9) (Figure 2a), the average age of the obese boys was less (see Table 1); 6.6 years in 2011 compared to 9.95 years in 2005. The National Health Survey 2007-2008 for Australia documented that 10% of boys aged 5-17 years were obese and 16% of boys were overweight. In 2010 Broderick et al showed that there was no statistical significance between BMI for boys with haemophilia and their age matched peers. Our data for 2011 shows a similar number of boys with haemophilia are obese, but less boys are overweight compared to the National Survey. Of concern is the age at which boys with haemophilia are presenting as obese; now a mean 6.6 years compared to 9.95 years in 2005 and the number of overweight boys under age 6 years has increased from 1 – 5 over the same time period (Figure 2b).

In the last 3 years, two boys who were obese had accelerated weight loss (14yo BMI percentile 98 decreasing to 52 over 15 months; and 16yo BMI percentile 94 decreasing to 16 over 7 months) and were diagnosed with an eating disorder requiring referral to an eating disorder clinic.

Conclusion:

There is a relationship of high BMI in childhood and adulthood and obese children becoming obese adults. Boys with severe haemophilia are now being diagnosed as overweight/obese before school-age. Current weight management may lead to morbidity of developing an eating disorder. Early referral to weight management clinics should be considered and in extreme cases possible discussion of gastric banding/bypass.

Do we have to make weight management a more formal part of our education and treatment of haemophilia?

References:

C R Broderick et al. Fitness and quality of life in children with haemophilia. *Haemophilia* (2010), 16, 118-123

National Health Survey 2007-2008. ABS Australian Social Trends 4102. 0 September 2009

Acknowledgements

Ms. Julia Ekert
Ms. Jill Rodda

Contribution:

Awareness of overweight/obese boys with severe haemophilia before school-age and risk of eating disorder with current weight loss management suggesting new strategies need to be employed.

