

**Epidemiology/Genetics Abstracts**

**Title:** OBESITY AND SPINA BIFIDA: ANOTHER MAJOR CHALLENGE?

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**Background:** Children with Spina Bifida (SB) receive multidisciplinary medical care (doctors, nurses, social work, and dietitian), specifically through Children's Rehabilitation Services (CRSSBC). In view of the increased prevalence of obesity in children, children with SB represent a major challenge as energy requirements are lower but they are exposed to the same obesigenic environment. To our knowledge, the prevalence of obesity in children with SB has not been reported.

**Method:** Chart review of patients enrolled in CRSSB. Data included age, gender, weight, and height at each visit.

**Results:** Consent requests were sent to 66 patients of the CRSSBC. Out of 22 (30%) who consented to chart review, 20 medical records were complete. 12 (60%) patients were females, the mean age was  $12 \pm 7$  years, and the mean weight was  $35 \pm 29$  kg. Length or height were recorded but not considered reliable due to underlying orthopedic co-morbidity. BMI could not be calculated. Therefore, we chose weight for age as a measure of obesity (greater than 20% above Ideal Body Weight for Age (IBWA)). The mean weight was  $107 \pm 31$  % IBWA at the first visit. Over the course of the CRSSBC care, ten patients (50%) were identified as obese (mean weight  $140 \pm 16$  % IBWA). Altogether, 15 (75%) patients had an IBWA of 100% or greater

**Conclusion:** Children with SB have a 50% prevalence of obesity, higher than aged-matched children. A majority of children with SB have a weight 100% or greater IBWA for able bodied children. The measurement of IBWA may represent over nutrition children with SB. Measurements such skin fold thickness to better identify overweight status in children with SB need to be implemented. Obesity will likely develop into a major challenge in these children.