**Without scale: A retrospective analysis of cats and dogs with severe obesity presenting to a weight loss clinic**

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**Objectives**

To compare outcomes of weight loss in dogs and cats with differing degrees of obesity.

**Methods**

In this retrospective study, records of dogs and cats attending a specialist obesity care clinic between 2004-2022 were reviewed. Dual-energy X-ray absorptiometry was used to determine body composition, and cases were defined as either stage I (<40% above ideal) or II (>40% above ideal) obesity. Change in the proportions of new cases in different obesity stages over time were determined using a Chi-square test for trend, whilst Mann-Whitney tests were used to compare differences in weight loss outcomes between stages.

**Results**

118 (40%) and 180 (60%) dogs had stage I or II obesity, respectively, with no change in the proportions of new cases in the different obesity stages over time (P=0.357). 72 (60%) and 49 (40%) cats had stage I or II obesity, respectively, and the proportion of new cat cases with stage II obesity increased over time (P=0.011). Compared with stage I obesity, fewer dogs in stage II obesity completed their weight programme (P<0.001), whilst those that did complete lost more weight overall (P<0.001), but more slowly (P<0.001) and with more lean tissue loss (P<0.001). Similarly, fewer stage II obesity cats completed (P=0.041), with those completing losing more weight (P=0.021) and lean tissue (P=0.004), although the weight loss rate was not different between stages (P=0.167).

**Statement (conclusions)**

Approximately half of all pets attending a specialist obesity care clinic have stage II obesity and have poorer weight loss outcomes than those in stage I obesity.