Overweight

Being overweight or fat is having more body fat than is optimally healthy. Being overweight is especially common where food supplies are plentiful and lifestyles are sedentary.

As of 2003, excess weight reached epidemic proportions globally, with more than 1 billion adults being either overweight or obese.

In 2013 this increased to more than 2 billion. Increases have been observed across all age groups.

A healthy body requires a minimum amount of fat for proper functioning of the hormonal, reproductive, and immune systems, as thermal insulation, as shock absorption for sensitive areas, and as energy for future use. But the accumulation of too much storage fat can impair movement, flexibility, and alter the appearance of the body.

Being overweight or mildly obese has been associated with a decreased risk of death or hospitalization in patients with cardiovascular disease. Similarly, overweight patients admitted to an intensive care unit (ICU) have improved survival up to 1 year after admission. These counterintuitive observations are examples of the “obesity paradox.” Does the obesity paradox exist in patients with intracerebral hemorrhage (ICH)?:

In a study Dangayach et al. examined whether there was an association between obesity and functional outcome in patients with ICH.

They analyzed 202 patients admitted to the neurological ICU (NICU) who were prospectively enrolled in the Columbia University ICH Outcomes Project between September 2009 and December 2012. Patients were categorized into 2 groups: overweight (body mass index [BMI] ≥ 25 kg/m2) and not overweight (BMI < 25 kg/m2). The primary outcome was defined as survival with favorable outcome (modified Rankin Scale [mRS] score 0-3) versus death or severe disability (mRS score 4-6) at 3 months.

The mean age of the patients in the study was 61 years. The mean BMI was 28 ± 6 kg/m2. The mean Glasgow Coma Scale score was 10 ± 4 and the mean ICH score was 1.9 ± 1.3. The overall 90-day mortality rate was 41%. Among patients with a BMI < 25 kg/m2, 24% (17/70) had a good outcome, compared with 39% (52/132) among those with a BMI ≥ 25 kg/m2 (p = 0.03). After adjusting for ICH score, sex, do-not-resuscitate code status, and history of hypertension, being overweight or obese (BMI ≥ 25 kg/m2) was associated with twice the odds of having a good outcome compared with patients with BMI < 25 kg/m2 (adjusted odds ratio 2.05, 95% confidence interval 1.03-4.06, p = 0.04).

In patients with ICH admitted to the NICU, being overweight or obese (BMI ≥ 25 kg/m2) was associated with favorable outcome after adjustment for established predictors. The reason for this finding requires further study [1].

1)
Dangayach NS, Grewal HS, De Marchis GM, Sefcik RK, Bruce R, Chhatlani A, Connolly ES, Falo MC, Agarwal S, Claassen J, Schmidt JM, Mayer SA. Does the obesity paradox predict functional outcome in intracerebral hemorrhage? J Neurosurg. 2017 Dec 8:1-5. doi: 10.3171/2017.5.JNS163266. [Epub ahead of print] PubMed PMID: 29219759.