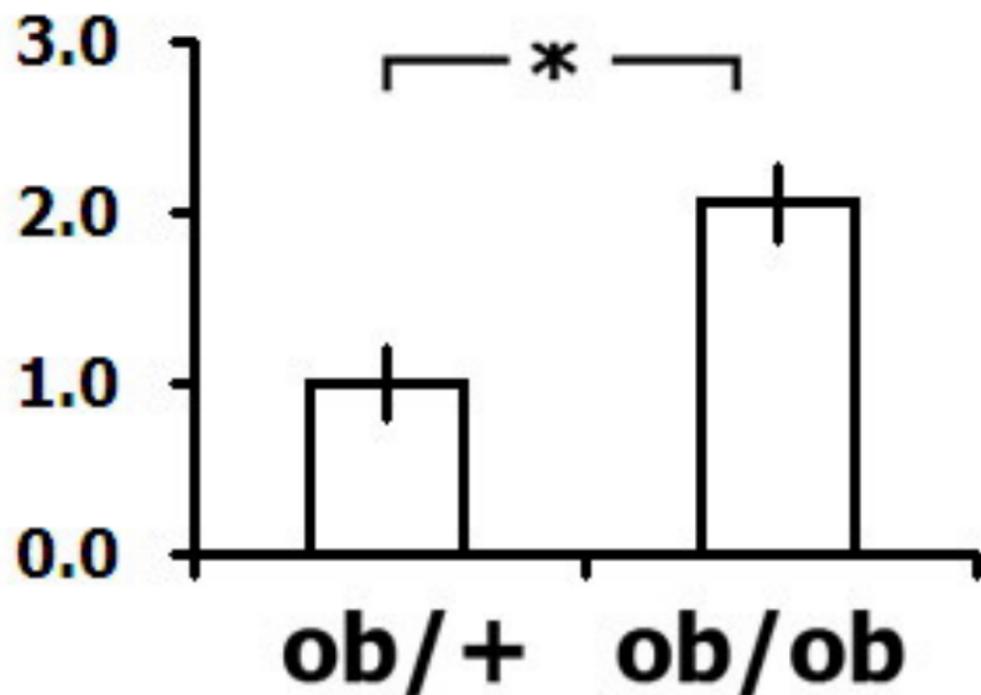


HIF-1 α



Online Supplementary Videos

Video 1

Blood flow in post-capillary venules within lean (ob/+) adipose tissue. The flow is relatively continuous, and very few leukocytes or platelets are interacting with the vessel walls. The images were obtained at 30 frames/s using a 100x objective lens after injecting FITC-dextran (MW 150,000) and reconstructed at 3x-speed. Blood cells were negatively visualized. Please note that the pulsating motion seen in the video is not from the heart beat, but is a combined motion artifact. The scale bar represents 10 μm

Video 2

Blood flow in post-capillary venules within adipose tissue from normal IgG treated obese (ob/ob) mice. Note the presence of adherent leukocytes and platelet aggregation on the vessel walls. There tended to be fewer erythrocytes, and the blood flow velocity was slower. Images were obtained using a 100x objective lens after injecting FITC-dextran (MW 150,000) and reconstructed at 3x-speed. Please note that the pulsating motion seen in video is not from the heart beat, but is a combined motion artifact. The scale bar represents 10 μm .

Video 3

Blood flow in post-capillary venules in anti-ICAM-1-treated obese (ob/ob) adipose tissue. Blood flow was faster and more continuous than in normal IgG treated ob/ob mice (compare to Video 2) and fewer adherent leukocytes and platelet aggregates

were observed than in untreated ob/ob mice. Images were obtained using a 100x objective lens after injecting FITC-dextran (MW 150,000) and reconstructed at 3x-speed. Please note that the pulsating motion seen in video is not from the heart beat, but is a combined motion artifact. The scale bar represents 10 μm .

Video 4

Relatively continuous blood flow in capillaries within lean (ob/+) adipose tissue. Images were obtained using a 100x objective lens after injecting FITC-dextran (MW 150,000) and reconstructed at 3x-speed. The scale bar represents 10 μm .

Video 5

Varied and discontinuous blood flow in capillaries within adipose tissue from normal IgG treated obese (ob/ob) mice. The passing leukocyte appears to perturb the flow. Images were obtained using a 100x objective lens after injecting FITC-dextran (MW 150,000) and reconstructed at 3x-speed. The scale bar represents 10 μm .

Video 6

Blood flow in capillaries within anti-ICAM-1-treated obese (ob/ob) adipose tissue. Note that the discontinuity in blood flow is lessened. Images were obtained using a 100x objective lens after injecting FITC-dextran (MW 150,000) and reconstructed at 3x-speed. The scale bar represents 10 μm .

Video 7

Leukocyte rolling in a post-capillary venule in an ob/ob mouse visualized using acridine orange. Passing leukocytes in the blood flow can also be seen. Images were obtained using a 100x lens and reconstructed at 3x-speed. The scale bar represents 10 μm .

Video 8

Firmly adherent leukocytes and platelet aggregates on the vessel wall within a post-capillary venule in an ob/ob mouse. Leukocytes were visualized using acridine orange, platelets using anti-CD41 antibody. Images were obtained using a 100x lens and reconstructed at 3x-speed. The scale bar represents 10 μm .

Video 9

Platelet kinetics in capillaries within ob/+ adipose tissue visualized by R-phycoerythrin-conjugated anti-CD41 antibody. Images were obtained using a 100x lens and reconstructed at 3x-speed. The scale bar represents 10 μm .

Supplemental Figure 1

RT-PCR analysis of HIF1- α expression in whole adipose tissue from ob/+ and ob/ob mice (n=5 animals). * P <0.05.