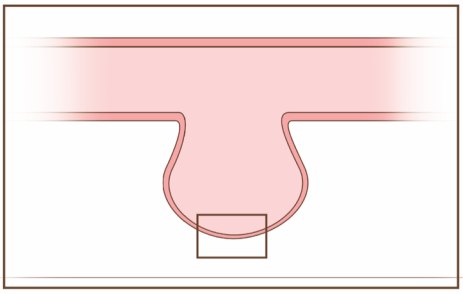
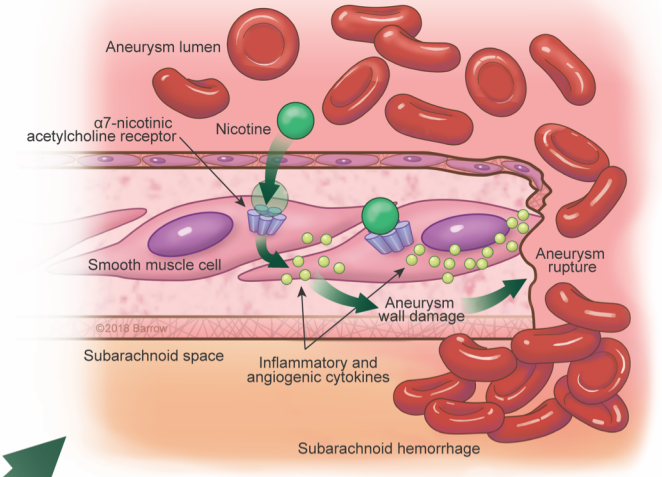
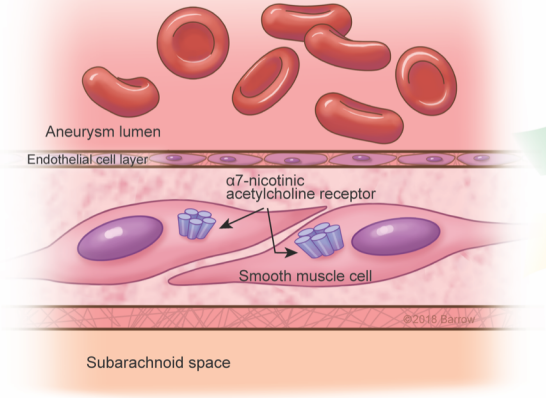
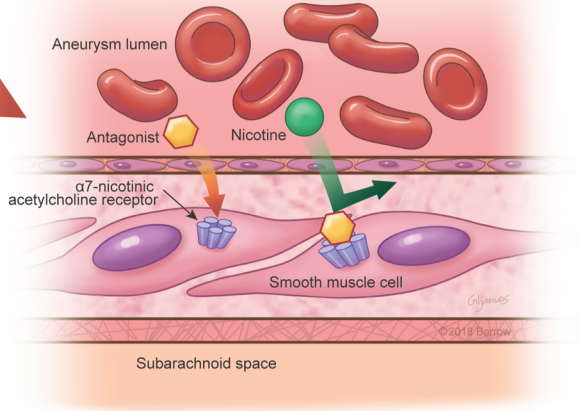






Nicotine

Antagonist



BARROW
Neurological Institute

Using a mouse model of intracranial aneurysm, we have shown that nicotine exposure increases aneurysmal rupture through α7-nicotinic acetylcholine receptors on vascular smooth muscle cells. Activation of α7-nicotinic acetylcholine receptor leads to sustained angiogenesis and inflammation that promote aneurysmal rupture. α7-nicotinic acetylcholine receptor may serve as a potential therapeutic target for the prevention of intracranial aneurysmal rupture. (Figure is used with permission from Barrow Neurological Institute, Phoenix, Arizona.)