Pulmonary arteriovenous malformations (PAVMs), although most commonly congenital, are usually detected later in life. We present a case of a 19-year-old woman with no previous history of AVM or telangiectasia, who presented dyspnea, hypoxia by massive left hemothorax, in 34th week of gestation. After emergent cesarean delivery, a chest computed tomography (CT) with contrast showed a likely 3 cm area of active contrast in left lower lung. Chest tube placement revealed 2 liters of blood. Patient was subsequently found to have bleeding pulmonary AVM. A successful embolisation of AVM followed by lung atipic resection involving AVM and decortication for lung re-expansion relieved the hypoxia.