We consider a smooth compact manifold $M$ homotopy equivalent to a compact manifold $N$ admitting a negatively curved metric. We consider the question of whether $M$ and $N$ are diffeomorphic. Farrell and Jones have shown that this is not always possible even for homeomorphic $M$ and $N$. Using Besson-Courtois-Gallot theory, we examine special conditions which do give a diffeomorphism. (Received October 05, 2004)