It is well known that causal inference and predictive inference are two different concepts. Wang and his collaborators proposed a data-driven method for model selection in a causal inference framework that accounts for uncertainty associated with model selection (*Bayesian Adjustment for Confounding*). We will discuss this method and examine its theoretical basis. We also show that the method can be justified more rigorously using the graphical framework advocated by Pearl and deriving sufficient conditions to avoid confounding.