Causal diagrams and the logic of matched case-control studies [Corrigendum]

Shahar E, Shahar DJ. *Clinical Epidemiology*. 2012;4:137–144.

On page 140, Figure 8 Diagram B shows a cause of D that is not a confounder. After conditioning on S , an association is also created between E and C , and therefore, a dashed line should connect these variables (revised figure below). As a result, three paths (not two) now connect C and D ($C \rightarrow E \rightarrow D$; $C \rightarrow D$; and $C \rightarrow S \rightarrow D$). Since these three paths sum up to a null association between C and D , the sum of $C \rightarrow D$ and $C \rightarrow S \rightarrow D$ is not null, and colliding bias is present (unless the effect of E on D is precisely null).

Figure 8 Special cases of matching: no net bias under the precise null (A); colliding bias in the absence of confounding bias (B and C).

Note: The question mark denotes the effect of interest.