

Author(s):
Question: Risk factors in KOA
Setting:
Bibliography:

Certainty assessment							N ₂ of patients		Effect		Certainty	Importance
N ₂ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Risk factors		Relative (95% CI)	Absolute (95% CI)		
gender - cohort study												
9	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	6654/30087 (22.1%)	0/0	OR 1.10 (0.98 to 1.24)	1 fewer per 1,000 (from 1 fewer to 1 fewer)	⊕○○○ Very low	CRITICAL
gender - case-control study												
8	observational studies	serious ^a	serious ^c	not serious	not serious	publication bias strongly suspected ^b	2674 cases 2829 controls		OR 1.05 (0.99 to 1.12)	-	⊕○○○ Very low	CRITICAL
							-	0.0%				
age - cohort study												
4	observational studies	serious ^a	not serious	not serious	not serious	none	4014/6413 (62.6%)	-/0	OR 1.04 (1.02 to 1.06)	1 fewer per -- (from 1 fewer to 1 fewer)	⊕○○○ Very low	CRITICAL
age - case-control study												
7	observational studies	serious ^a	not serious	not serious	not serious	none	3098 cases 3243 controls		OR 1.01 (1.00 to 1.01)	-	⊕○○○ Very low	CRITICAL
							-	0.0%				
BMI - cohort study												
5	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	4085/7797 (52.4%)	-/0	OR 1.06 (1.04 to 1.09)	1 fewer per 1,000 (from 1 fewer to 1 fewer)	⊕○○○ Very low	CRITICAL
BMI - case-control study												
6	observational studies	serious ^a	serious ^c	not serious	not serious	publication bias strongly suspected ^b	2765 cases 3183 controls		OR 1.04 (1.00 to 1.08)	-	⊕○○○ Very low	CRITICAL
							-	0.0%				
BMI≥24kg/m2 - cohort study												
6	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	3106/22915 (13.6%)	-/0	OR 1.29 (1.02 to 1.63)	1 fewer per -- (from 2 fewer to 1 fewer)	⊕○○○ Very low	CRITICAL
BMI≥24kg/m2 - case-control study												
5	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1974 cases 1734 controls		OR 1.32 (1.00 to 1.74)	-	⊕○○○ Very low	CRITICAL
							-	0.0%				
Trauma history - case-control study												
2	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1517 cases 1648 controls		OR 1.53 (0.71 to 3.33)	-	⊕○○○ Very low	IMPORTANT
							-	0.0%				
Trauma history - cohort study												
4	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1825/15481 (11.8%)	-/0	OR 1.34 (0.99 to 1.82)	1 fewer per -- (from 2 fewer to 1 fewer)	⊕○○○ Very low	IMPORTANT

case-control study - moist												
3	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1622 cases 1768 controls		OR 1.94 (0.38 to 9.96)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to 0 fewer)		
case-control study - sunless												
2	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1506 cases 1621 controls		OR 2.03 (0.33 to 12.47)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to 0 fewer)		
case-control study - moist+sunless												
2	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1506 cases 1621 controls		OR 2.60 (0.12 to 56.64)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to 0 fewer)		
case-control study - cold												
1	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	116 cases 147 controls		OR 1.95 (0.00 to 4285259.42)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to --)		
case-control study - Junior high school												
2	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1496 cases 1647 controls		OR 1.21 (0.62 to 2.36)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to 0 fewer)		
case-control study - High school												
2	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1496 cases 1647 controls		OR 0.49 (0.30 to 0.79)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to 0 fewer)		
case-control study - University												
2	observational studies	serious ^a	serious ^d	not serious	not serious	publication bias strongly suspected ^b	1496 cases 1647 controls		OR 0.22 (0.06 to 0.86)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%		0 fewer per -- (from 0 fewer to 0 fewer)		
case-control study - OA family history												
4	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	1800 cases 2223 controls		OR 1.04 (0.98 to 1.10)	-	⊕○○○ Very low	IMPORTANT
							-	0.0%		0 fewer per 1,000 (from 0 fewer to 0 fewer)		
case-control study - manual labour												
4	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	720 cases 783 controls		OR 1.11 (0.93 to 1.31)	-	⊕○○○ Very low	IMPORTANT
							-	0.0%		0 fewer per 1,000 (from 0 fewer to 0 fewer)		
case-control study - agricultural labor												
2	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	269 cases 323 controls		OR 1.17 (0.54 to 2.56)	-	⊕○○○ Very low	IMPORTANT
							-	0.0%		0 fewer per 1,000 (from 0 fewer to 0 fewer)		

cohort study - manual labour												
3	observational studies	serious ^a	not serious	not serious	not serious	none	1272/18346 (6.9%)	-/0	OR 1.09 (0.88 to 1.35)	1 fewer per 1,000 (from 1 fewer to 1 fewer)	⊕○○○ Very low	IMPORTANT
cohort study - drinking												
3	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	3563/10710 (33.3%)	-/0	OR 0.98 (0.79 to 1.21)	1 fewer per 1,000 (from 1 fewer to 1 fewer)	⊕○○○ Very low	NOT IMPORTANT
case-control study - drinking												
2	observational studies	serious ^a	not serious	not serious	not serious	none	287 cases 313 controls		OR 1.60 (0.40 to 6.45)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%				
cohort study - smoking												
4	observational studies	serious ^a	not serious	not serious	not serious	none	3170/20608 (15.4%)	-/0	OR 0.88 (0.74 to 1.04)	1 fewer per 1,000 (from 1 fewer to 1 fewer)	⊕○○○ Very low	NOT IMPORTANT
case-control study - smoking												
3	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	987 cases 1013 controls		OR 1.09 (0.84 to 1.41)	-	⊕○○○ Very low	NOT IMPORTANT
							-	0.0%				
case-control study - exercise												
4	observational studies	serious ^a	not serious	not serious	not serious	publication bias strongly suspected ^b	3713 cases 3995 controls		OR 0.75 (0.62 to 0.91)	-	⊕○○○ Very low	IMPORTANT
							-	0.0%				

CI: confidence interval; OR: odds ratio

Explanations

- a. Most information is from studies at low or unclear risk of bias. Potential limitations are likely to lower confidence in the estimate of effect.
- b. Funnel plot asymmetry
- c. I²=55%
- d. I²=65%