

Impact of Disclosure of Radiographic Test Results on Quality of Life Among Patients With Hernias: A Randomized Controlled Trial

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Background

Half of all Americans will get imaging of their abdomen/pelvis and nearly two-thirds of these studies will demonstrate a hernia

Incidental findings may or may not be disclosed and discussed with patient [1] which may impact their abdominal wall quality of life (AW-QOL) by diminishing function, causing pain, disfiguring the abdomen, and leading to serious life-threatening complications [2].

Objective

We aimed to determine if informing patients of the presence of a clinically apparent or occult hernia on imaging would change their abdominal wall quality of life (AW-QOL).

Methods

A single center, prospective, blinded randomized controlled trial (RCT) was performed following CONSORT guidelines

Duration

Study period: June to August 2018

Inclusion criteria

>18 y.o. with abdominal wall hernia found on elective outpatient CT abd/pelvis

Outcomes

Abdominal wall quality of life (AW-QOL) surveyed prior to CT and at 1 year follow up

- Intervention:** Patients were randomized to complete the follow-up survey before(control) or after(intervention) being informed of the presence of a hernia on their imaging results
- Exclusion criteria:** Patients who were pregnant, prisoners, emergency or inpatient CT scans, unable to provide consent or unable to stand for an exam

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Results

Patients' abdominal wall quality of life change at one year

	Group 1* N = 58	Group 2** N = 68	Difference in mean (95% CI)	P-Value
AW-QOL Scores (mAAS), mean(SD)				
Baseline	62.8(30.9)	64.8(32.1)	-	-
Follow-up	65.7(32.2)	65.9(29.9)	-0.2 (-11.2 to 10.8)	0.971

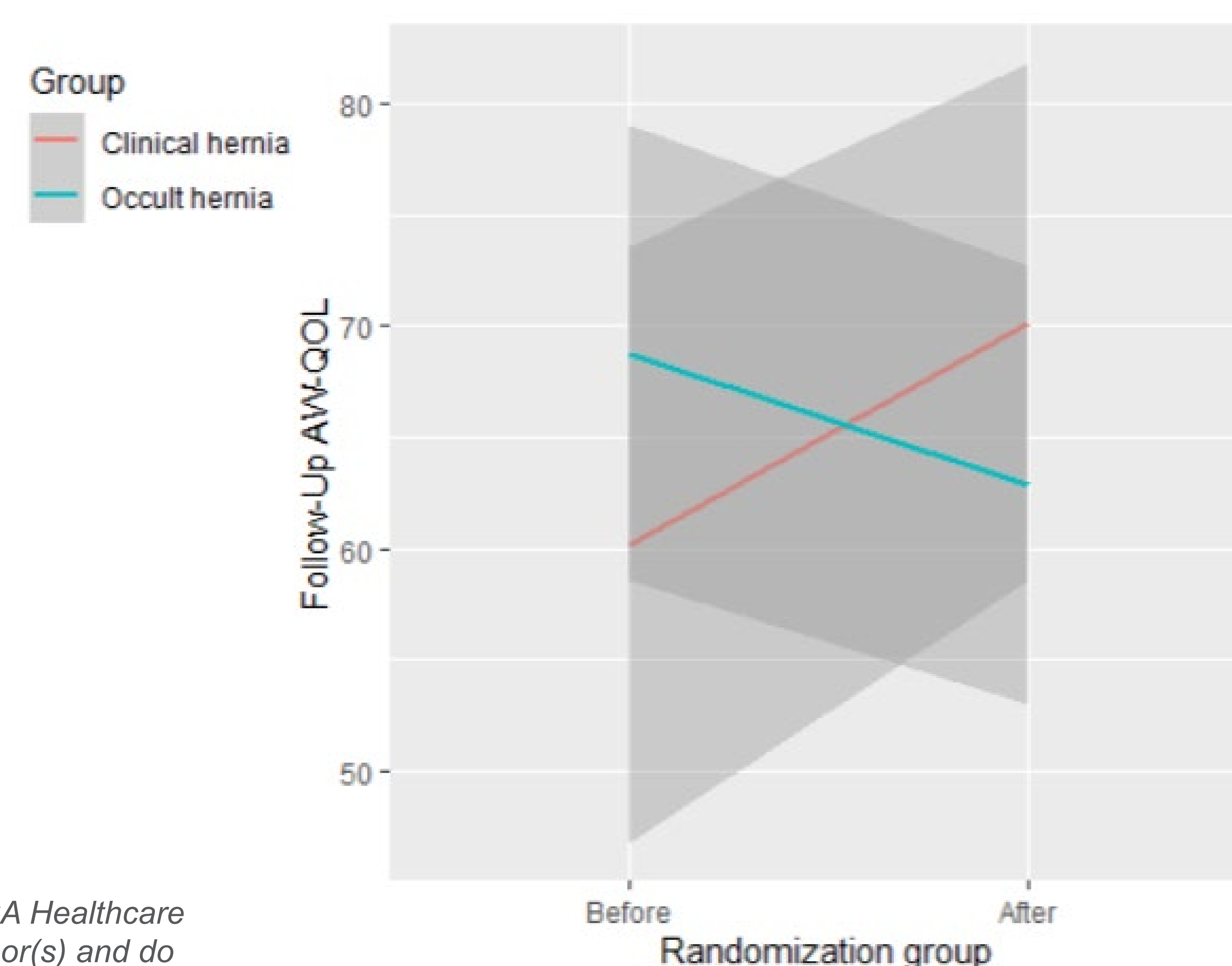
*Control group **Intervention group

Stratified analysis and test of interaction of mean (SD) abdominal wall quality of life scores

	Clinical Hernia (N = 49)				Occult Hernia (N = 77)			
	Group 1* (N=21)	Group 2** (N=28)	Difference in Mean (95% CI)	P-Value	Group 1* (N=37)	Group 2** (N=40)	Difference in Mean (95% CI)	P-value
Baseline	58.9 (31.1)	58.4 (33.4)	-		65.0 (31.1)	69.3 (30.8)	-	
Follow-up	60.2 (32.7)	70.2 (28.7)	10.0(-7.7 to 27.7)	0.262	68.8 (31.9)	62.9 (30.7)	-5.9(-20.1 to 8.3)	0.410
ANCOVA	-	-	10.3(-3.0 to 23.6)	0.126	-	-	-7.6(-20.8 to 5.7)	0.261

*Control group **Intervention group

Multilevel linear regression of follow-up AW-QOL



Discussion

Patients with occult hernias experienced a 9.2% decrease in AW-QOL after being informed of having a hernia while patients with a clinically apparent hernia experienced a 20.2% increase in AW-QOL.

Disclosing to patients findings of limited clinical importance may unnecessarily introduce anxiety and impact their quality of life while not disclosing important results may have ethical implications and not be patient-centered.

Conclusion

Information provided while conveying results of CT abdomen and pelvis scans can influence patients' perceptions of AW-QOL. When informed of their hernias, patients with occult hernias experienced a decline in their AW-QOL while patients with clinical hernias experienced an improvement.

References

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