



Women with silicone breast implants have more non-specific health symptoms

Results of a retrospective electronic health records based matched cohort study

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Background

Breast augmentation most popular cosmetic surgical procedure worldwide

Safety of silicone breast implants under scrutiny

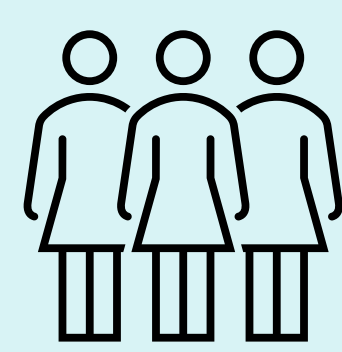
Possibly a link with non-specific health symptoms: **“Breast Implant Illness”**

Aim

To assess the association between cosmetic silicone breast implants and non-specific health symptoms

Methods

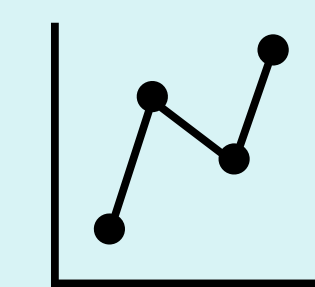
With data from the Dutch Breast Implant Registry (2015-2018), 500+ general practices (2014-2021) and Statistics Netherlands (2014-2021), we examined:



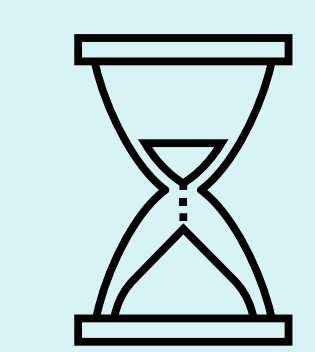
688 women with cosmetic silicone breast implants; **1301** women without silicone breast implants



Thirteen non-specific health symptoms registered by the general practitioner



Symptoms analyzed separately + combined into **“substantial symptoms”**



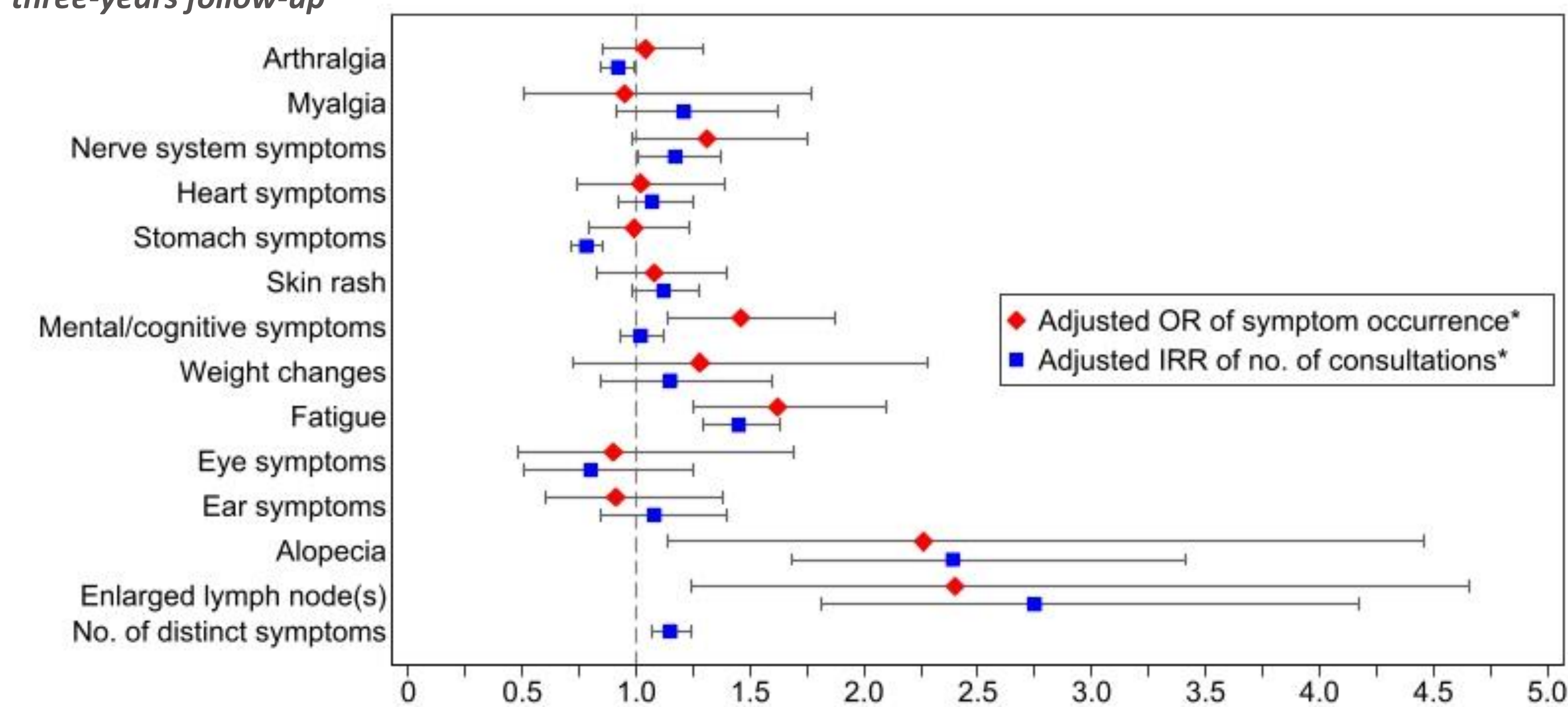
1 year prior to implantation (baseline) until **3 years after** implantation (follow-up)

Substantial symptoms: ≥ 3 distinct non-specific health symptoms and for at least 2 symptoms ≥ 2 consultations within one year

Results

Non-specific health symptoms

Figure 1. Comparisons of symptoms in women with breast implants to women without breast implants, in the three-years follow-up



Substantial symptoms

Women with breast implants sign. higher likelihood of substantial symptoms...

- ...in the three-years follow-up period **compared to women without breast implants**
- ...in the **second year after implantation compared to before** implantation

Table 1. Comparisons of substantial symptoms in women with breast implants to women without breast implants

	Baseline			Three-years follow-up		
	% (n)	Adjusted OR (95% CI)*	p	% (n)	Adjusted OR (95% CI)*	p
Women with breast implants	3.8 (26)	1.09 (0.64– 1.84)	0.76	12.2 (84)	1.44 (1.04 – 2.00)	0.03
Women without breast implants	3.8 (49)	Ref.		8.7 (113)	Ref.	

Table 2. Substantial symptoms at baseline compared to each year of follow-up

	Year 1 post implantation		Year 2 post implantation		Year 3 post implantation	
	OR (95% CI)	p	OR (95% CI)	P	OR (95% CI)	p
Women with breast implants	1.15 (0.63 – 2.09)	0.65	2.13 (1.22 – 3.72)	0.01	1.25 (0.69 – 2.26)	0.45

* Adjusted for occurrence of (substantial) symptoms in baseline (yes/no) [three years post index analysis], age, migration background, income level, educational level, household composition, pre-existing diseases and medication use

References

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Conclusion

- These results suggest an **association between** women who have cosmetic **breast implants** and **substantial non-specific health symptoms**
- General practitioners, plastic surgeons and other involved medical specialists should be aware of the possibility of health complaints related to silicone breast implants
- Still more research is needed to explore causality