STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract
		Text: See line 16-18
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found
		Text: See entire abstract
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported
		Text: See line 32-47
Objectives	3	State specific objectives, including any prespecified hypotheses
		Text: See line 47-50
Methods		
Study design	4	Present key elements of study design early in the paper
		Text: See line 56-57
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
		Text: See line 56-72
Participants	6	*Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up
		Text: See line 56-72
		Case-control study—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls
		Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants
		(*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed
		Case-control study—For matched studies, give matching criteria and the number of controls per case
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable
		Text: See line 73-79
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group
		Text: See line 73-79
Bias	9	Describe any efforts to address potential sources of bias
		Text: See line 60-61
		Text: See line 162-181
Study size	10	Explain how the study size was arrived at
		Text: See line 56-61
		Text: See Figure 1

Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why **Text: See line 73-79** **Text: See line 81-88**
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding **Text: See line 81-88**
		(*b*) Describe any methods used to examine subgroups and interactions **Text: See line 85-88**
		(*c*) Explain how missing data were addressed **Text: Missing data was excluded. See line 61-61 + Figure 1. Only menarchal status was with missing data (Table 1-3). Since these numbers were low and hence without major impact, we decided not to explain this further in the manuscript.**
		(*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed **Text: Missing data was excluded. See line 60-61 + Figure 1** *Case-control study*—If applicable, explain how matching of cases and controls was addressed *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy
		(*e*) Describe any sensitivity analyses **Text: See line 86-88**

Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed **Text: See line 90-92 + Figure 1**
		(b) Give reasons for non-participation at each stage **Text: See line 90-92 + Figure 1**
		(c) Consider use of a flow diagram **Text: Figure 1**
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders **Text: See line 92-94 + Table 1**
		(b) Indicate number of participants with missing data for each variable of interest **Text: See Table 1-3 + Figure 1. Only menarchal status was with missing data (Table 1-3). Since these numbers were low and hence without major impact, we decided not to explain this further in the manuscript.**
		(c) *Cohort study*—Summarise follow-up time (eg, average and total amount) **Text: See line 67-72 + Table 3 (age). In Table 1-3 the field "fusion surgery performed at 2-year follow-up" was evaluated through medical journals and is exactly two-years post brace treatment for all patients. Therefore, specifying further is not needed.**
Outcome data	15*	*Cohort study*—Report numbers of outcome events or summary measures over time **Text: See line 89-101 + Table 1-3**
		Case-control study—Report numbers in each exposure category, or summary measures of exposure
		Cross-sectional study—Report numbers of outcome events or summary measures
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included **Text: See line 92-108 + Table 1-4. Not relevant to double report adjusted confounders in both text and table 4. Therefore we report the main finding in the text and additional information can be seen in table 4. Adjusted variables are known predictors in the field of Spine (via literature) and does not require further explanation.**
		(*b*) Report category boundaries when continuous variables were categorized **Text: See Table 1-3**
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period **Not applicable**
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses **Text: See line 95-108**
Discussion		
Key results	18	Summarise key results with reference to study objectives **Text: See line 110-115**
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias **Text: See line 162-181**

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence **Text: See line 183-191**
Generalisability	21	Discuss the generalisability (external validity) of the study results **Text: See line 56-72.** **The study follows the widely accepted inclusion criteria presented by Richards et al. in "Standardization of Criteria for Adolescent Idiopathic scoliosis Brace Studies". DOI: 10.1097/01.brs.0000178819.90239.d0.** **Further explanation is not necessary and does not need to be written in the text.**
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based **Not applicable for the current study**

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.