STROBE Statement—Checklist of items that should be included in reports of ***case-control studies***

	Item No	Recommendation	Reported on Page No/Line No	Reported on Section/Paragraph
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	Page3/line2-13	Abstract/Para1-2
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	Page3/line 14-16 Page4/line 1-4	Abstract/Para3-4
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 5/line 3-16 Page 6/line 1	Introduction/Para 1-3
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 5/line 15-16 Page 6/line 1	Introduction/Para 3
Methods				
Study design	4	Present key elements of study design early in the paper	Page 6/line 4-5	Methods/Para 1
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 6/line4-9	Methods/Para 1
Participants	6	(*a*) 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	Page 6/line4-9	Methods/Para 1
		(*b*) For matched studies, give matching criteria and the number of controls per case	Page 6/line4-9	Methods/Para 1
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page 7/line 9-16 Page 8/line 1-16	Methods/Para 3-4
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	Page 7/line 9-16 Page 8/line 1-2	Methods/Para 3
Bias	9	Describe any efforts to address potential sources of bias	Page 6/line 5-6	Methods/Para1
Study size	10	Explain how the study size was arrived at	Page 6/line 4-9	Methods/Para 1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page 9/line1-5	Methods/Para 5

Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	Page 9/line1-5	Methods/Para 5
		(*b*) Describe any methods used to examine subgroups and interactions	Page 9/line1-5	Methods/Para 5
		(*c*) Explain how missing data were addressed	Page 9/line1-5	Methods/Para 5
		(*d*) If applicable, explain how matching of cases and controls was addressed	Page 9/line1-5	Methods/Para 5
		(*e*) Describe any sensitivity analyses	Page 9/line1-5	Methods/Para 5
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	N/A	N/A
		(b) Give reasons for non-participation at each stage	N/A	N/A
		(c) Consider use of a flow diagram	N/A	N/A
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	N/A	N/A
		(b) Indicate number of participants with missing data for each variable of interest	N/A	N/A
Outcome data	15*	Report numbers in each exposure category, or summary measures of exposure	Page 9/line8-15	Results/Para 1-2
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	Page9/line 9-15	Results/Para 2
		(*b*) Report category boundaries when continuous variables were categorized	Page9/line 9-15	Results/Para 2
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A	N/A
Discussion				
Key results	18	Summarise key results with reference to study objectives	Page 9/line 16 Page 10/line 1-4	Discussion/Para1

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	Page 14/line 2-11	Discussion/Para 9
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 10/line 6-16 Page 11/lne1-16 Page 12/line1-16 Page 13/line1-14	Dicussion/Para 2-7
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 13/line15-16 Page 14/line1	Discussion/Para 10
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	Page 15/line 5	Acknowledgement

*Give information separately for cases and controls.

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 http://www.strobe-statement.org.

The reasons for not applicable items:

13 and 14.
Participants of this study were consecutive patients (50 males and 19 females) who were treated with single level CBT-PLIF from October 2011 to December 2016 except for trauma, tumor, infection, and congenital disease. Because those details were written in “Methods”, we didn’t mention in “Results”.

16(c).
Because main results of this study were obtained by Multiple logistic regression analysis, we didn’t consider the content of 16(C).

17.
We didn’t try other analyses for making results of this study clearly.

Article information: http://dx.doi.org/10.21037/jss-20-608.
*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.