

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Radiology

**Manuscript NO:** 32682

**Title:** Interventional radiology treatment for pulmonary embolism

**Reviewer's code:** 00233953

**Reviewer's country:** United States

**Science editor:** Xiu-Xia Song

**Date sent for review:** 2017-02-09

**Date reviewed:** 2017-02-11

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> [ Y] Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> [ Y] Grade B: Minor language	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Duplicate publication	publication
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor	language polishing	<input checked="" type="checkbox"/> [ Y] No	<input type="checkbox"/> Minor revision
	<input type="checkbox"/> Grade D: Rejected	BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> [ Y] No	

## COMMENTS TO AUTHORS

there are no specific comments

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Radiology

**Manuscript NO:** 32682

**Title:** Interventional radiology treatment for pulmonary embolism

**Reviewer's code:** 00608206

**Reviewer's country:** Spain

**Science editor:** Xiu-Xia Song

**Date sent for review:** 2017-03-08

**Date reviewed:** 2017-03-11

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

Review and update article on the treatment of venous thromboembolism and especially pulmonary embolism (PE). The article is of interest and reflects the current treatment, especially regarding the treatment of massive and submassive PE. An updated review of invasive treatment (endovascular techniques) is made, where the authors have experience and recognized prestige. The text is clear and concise and the tables and figures adequate and quality. The bibliography is updated with more than 20 references from the last 5 years, some of them from the authors of the manuscript.

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Radiology

**Manuscript NO:** 32682

**Title:** Interventional radiology treatment for pulmonary embolism

**Reviewer's code:** 02594540

**Reviewer's country:** Egypt

**Science editor:** Xiu-Xia Song

**Date sent for review:** 2017-03-08

**Date reviewed:** 2017-03-13

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Duplicate publication	publication
<input type="checkbox"/> Grade D: Fair	<input checked="" type="checkbox"/> Grade C: A great deal of	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor	language polishing	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Minor revision
	<input type="checkbox"/> Grade D: Rejected	BPG Search:	<input checked="" type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

Dear Editor,

Thank you for allowing me to review this manuscript.

In this review, the authors discuss the types, manifestations, and treatment options of pulmonary embolism concentrating on the massive type, then they discuss the indications, techniques, and complications of catheter directed therapy.

### General Comments:

- Many parts in the manuscript are difficult to understand and need to be written in a simpler clearer form. Some examples are:  
 "It has incidence of 100 cases / 100,000 inhabitants of VTE in Europe"  
 "It has been study for a more precise action of these drugs a more efficient method of deployment is necessary, and the method to infuse the fibrinolytic agent within the thrombus has had excellent results"

"The treatment recommended for clinically stable PE is anticoagulation whereas for severe massive PE with all the guidelines recommend the use of fibrinolytics."

"the administration of lower-dose fibrinolytic therapy can be administered via catheter placed within the pulmonary artery or in the thrombus and this may be done with or without concomitant aspiration and/or clot fragmentation."

- The authors should adopt a consistent classification of PE "e.g., low risk, submassive, and massive" and avoid using other terms "e.g., severe" to avoid confusion.
- The authors did not mention ventilation/perfusion scanning and surgical pulmonary embolectomy which are established tools for diagnosis and treatment of massive PE, respectively.
- There are many linguistic mistakes. Some examples are:
  - "are *two* clinical *presentation* of PE"
  - "the criteria *is* related"
  - "it *is recommended* only anticoagulation therapy"
  - "the attending physicians *which* have access"
  - "has *important mortality*"
  - "Estreptokinase" in Table 2.
- There are some mistakes regarding abbreviations. Examples are:
  - The authors used an abbreviation in the last sentence in the manuscript "CTEPH"
- Many mistakes regarding the clinical aspects of PE:
  - The authors mention a decrease rather than an increase in right ventricular afterload.
  - The authors mention elctromechnical dissociation (the more proper name is pulseless electrical activity) as a manifestation after syncope and chest pain. EMD is a form of cardiac arrest and should be mentioned in the suitable context.
  - The authors mention "25-65% requires an immediate cardiopulmonary resuscitation". Cardiopulmonary resuscitation is a term used specifically in cases of cardiac arrest.
- There is a lot of repetition in the text especially regarding the manifestations and treatment options of massive and submassive PE. I think the authors should choose a specific site in the manuscript and discuss the types, manifestations, and treatment options only once.
- There are some contradictory sentences:
  - "An interventional approach in an acute massive PE is now considered the treatment of choice according to the clinical guidelines of the ACCP (11), especially when a systemic thrombolytic therapy fails or is contraindicated"

“The ACCP and the Task Force for diagnosis and management of pulmonary embolism of ESC in their different guidelines recommend systemic fibrinolysis and only recommend the CDT treatment when there is contraindication to systemic fibrinolysis (11,49,50)”

- Sometimes in the text, the authors mention the journal in which the cited papers were published:

“was published in *Circulation* in 1988”

“The meta-analysis published in *JVIR* in 2008”

The journal name should not be mentioned in the text as it is already mentioned in the References.

- “CDT” referred to “catheter directed *thrombolysis*” in the Introduction then to “catheter directed *therapy*” after that.
- When citing the author of a previous article in the text, use the last name only and don’t use the first and middle initials.

“Kuo WT”

“Verstraete M”

## **Specific Comments:**

### ***Introduction:***

- ACCP: Please mention the full name then the abbreviation in the first time.
- “other authors advocate the use of catheter directed thrombolysis (CDT), mechanical fragmentation, thrombus aspiration and vena cava filter as therapeutic management that provides excellent results in a massive PE”.

First: mechanical fragmentation and thrombus aspiration are methods included in the CDT technique. This should be more clear.

Second: vena cava filter is not a treatment of massive PE.

The 3 treatment options of massive PE are systemic thrombolysis, surgical pulmonary embolectomy, and catheter based techniques.

### ***Definition of Massive and Submassive PE***

- I think “Types and Definitions of PE” may be more proper.
- “Massive and submassive PE are two clinical presentation of PE”.  
These are subtypes not presentations of PE.
- “electromechanical dissociation” is a form of cardiac arrest not a symptom of PE.
- Please don’t repeat the definition and manifestations in different manners, because this causes confusion.
- “criteria is related with”: criteria are related to.
- “cause a decrease in right ventricular afterload”: an increase in the afterload not a decrease.
- “miocardial”: myocardial.

#### *Massive PE Diagnosis*

- The RV dysfunction in submassive PE is diagnosed with echocardiography and/or elevated cardiac enzymes.
- The definitive diagnostic tools of massive PE are CT pulmonary angiography and ventilation/perfusion scanning. The latter is not mentioned at all as a diagnostic tool.
- The supportive diagnostic tools are d-dimer, cardiac enzymes, lower limb duplex, and echocardiography.
- The 3<sup>rd</sup> paragraph is describing the treatment. I think this should not be mentioned here.

#### *Medical treatment and support in severe PE (massive and submassive)*

- “permeable airway”: patent airway.
- “conventional unfractionated heparin”: please remove “conventional”
- “Recombinant tissular cell plasminogen activator”: Recombinant tissue plasminogen activator.
- “urokinase-type plasminogen activator”: simply urokinase.
- The 3 thrombolytic agents (arranged chronologically) are: urokinase, streptokinase, and rTPA
- “streptokinase 100,000 IU in 12-24 hours”: The proper dose is either 250,000 U bolus then 100,000 U/h for 12 -24 h, or 1,500,000 U over 2 h. This is correctly mentioned in the table.

#### *Endovascular techniques for the treatment of massive PE*

- “It has been study for a more precise action of these drugs a more efficient method of deployment is necessary, and the method to infuse the fibrinolytic agent within the thrombus has had excellent results”. This sentence should be written in a clearer way.

#### *Results of endovascular techniques for the treatment of PE*

- Please remove the whole first paragraph.
- “The first study on which the ACCP recommendations are based”. I think the ACCP recommendations are based on more than one study.
- I think the success rates in the CDT studies should be mentioned and compared to other strategies. Studies comparing one CDT technique with another should be mentioned.
- The authors cited the whole reference instead of its number in:  
“Similar results have now been obtained by combining local fibrinolysis with thrombus fragmentation or aspiration (De Gregorio MA 2010, Liang NL (Vascular) 2016).”

#### *Complications*

- “treatment with systemic fibrinolysis reduced mortality by 56%”. This should not be mentioned under “complications”.
- I think the complication rates for CDT should be mentioned and may be compared to other therapies (systemic thrombolysis and embolectomy).

#### *Conclusions*

- “RV disfunction”: dysfunction

#### *References:*

- Please revise these references: 3, 16, 19, 29, 34,
- Ref. 55, 56, and 57 have missing pages.
- The day and moth are mentioned in the references?

#### *Figure Legends:*



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- Please revise the figure legends linguistically.
- I think the patient description in Figure 4 legend is incorrect.
- “Urokinase UI”?



## PEER-REVIEW REPORT

**Name of journal:** World Journal of Radiology

**Manuscript NO:** 32682

**Title:** Interventional radiology treatment for pulmonary embolism

**Reviewer's code:** 02577402

**Reviewer's country:** China

**Science editor:** Xiu-Xia Song

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**Date reviewed:** 2017-03-17

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input checked="" type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		[ Y ] No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		[ Y ] No	

## COMMENTS TO AUTHORS

The authors reviewed pulmonary embolism and its interventional radiological treatment. Some problems existed. 1. The language needs to be improved because of some grammar mistakes and mistyping here and there. 2. Title: The title is not good. it may be changed to Interventional radiological treatment of pulmonary embolism. Or other more suitable titles to reflect the specific topics of the review.