Residual or recurrent precancerous lesions after treatment of cervical lesions in HIV-infected women: a systematic review and meta-analysis of treatment failure

Pierre Debeaudrap, Joelle Sobngwi, Pierre-Marie Tebeu, Gary M. Clifford

Supplementary Material

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Supplementary Data S1. Medline search.

(Uterine cervical neoplasms OR cervical intraepithelial neoplasia OR CIN[All Fields] OR ((cervical OR cervix) AND (cancer OR tumor OR tumour OR malignan* OR neoplas* OR carcinoma* OR adenocarcinoma* OR precancer* OR dysplasia))) AND (surgery OR (lletz OR leep) OR (conisation OR conization) OR laser OR excis* OR cryotherapy OR cold coagulation OR cold coagulation OR thermocoagulation OR thermal coagulation OR treatment[MeSH Terms] OR therapeutics[MeSH Terms]) AND (("recurrence"[MeSH Terms] OR recurrence[Text Word]) OR residual[All Fields] OR follow up) AND (HIV Infections[MeSH Terms] OR HIV[MeSH] OR HIV[tiab] OR acquired immune deficiency syndrome virus OR human immunodeficiency virus OR human immunodeficiency viruses OR aids).

Supplementary Table S1. Characteristics of studies fully reviewed but not included in the meta-analysis, by reason for non-inclusion.

Study author, publication year	Setting & period	Treatment modality	Type of lesion treated[a]	Post-treatment outcome criteria	Number of subjects	
					HIV+	HIV-
Follow-up (maximum or median) <6 months						
Adam, 2008	South Africa (2003 – 2006)	LEEP	High-grade	Cyto	575	-
Batra, 2010	South Africa (2006 – 2009)	LEEP	Any grade	Cyto	219	275
Malapati, 2011	US (2004 – 2008)	LEEP	Any grade	Cyto & histo	118[b]	
Mutyaba, 2010	Uganda (2007 – 2008)	Mixed/other	Any grade	VIA & histo	464[b]	
Unavailability of relevant data (numbers treated and/or post-treatment outcomes) on HIV-infected women						
Serati, 2012	Italy (1999 – 2009)	Mixed/other	Any grade	Cyto & histo	4	278
English, 2014	US (1999 – 2011)	Mixed/other	High-grade	Cyto		118[b]
Malapati, 2011	US (2004 – 2008)	LEEP	Any grade	Cyto & histo		464[b]
Mutyaba, 2010	Uganda (2007 – 2008)	Mixed/other	Any grade	VIA & histo		29[b]
Bambury, 2013	Jamaica (1994 – 2004)	Mixed/other	Any grade	Cyto	15	21

Belmonte, 2003	Spain[c]	LEEP	Any grade	Histo	71	80
Frega, 2006	Italy (1997 – 1999)	LEEP	High-grade	Cyto & histo	41	45
Ferrero, 2002	Italy (1991 – 2001)	NA	NA	Cyto & histo	23	-
Isaakidis, 2013	India (2010)	Mixed/other	Any grade	Cyto & histo	95	-
Joshi, 2013	India (2010 – 2011)	Mixed/other	Any grade	VIA & histo	53	-
<u>Absence of cytological and/or histological ascertainment of post-treatment outcome</u>						
Campbell, 2016	Malawi (2013 – 2015)	Thermoablation	VIA-positive	VIA	11	26
Martin, 2014	Guyana (2009 – 2012)	Mixed/other	VIA-positive	VIA	123	904
Oga, 2016	Nigeria (2010 – 2014)	Thermoablation	VIA-positive	VIA	120	57
<u>Populations selected upon post-treatment outcome</u>						
De Mello Silva, 2014	Brazil (2004 – 2011)	LEEP	High-grade	Histo	5[#]	95[#]
Van Bogaert, 2015	South Africa (2008 – 2013)	LEEP	High-grade	Histo	72[§]	104[§]

Abbreviations: Cyto & histo, cytology and histology; Mixed/other, use of different treatments among cryotherapy, thermal ablation or loop electrosurgical excision procedure (LEEP) and/or of other treatment; VIA & histo, visual inspection with acetic acid and histology.
[a]High-grade lesion: cervical intraepithelial neoplasia 2+ (CIN2+) or high-grade squamous intraepithelial lesion (HSIL) lesion;[b]Number of participants infected and uninfected with HIV not available; [c]Year of the study not available.
[#]case control design: 50 with treatment failure versus 50 without treatment failure. [§]Women with involved margins post-LEEP only.

References to Supplementary Table S1

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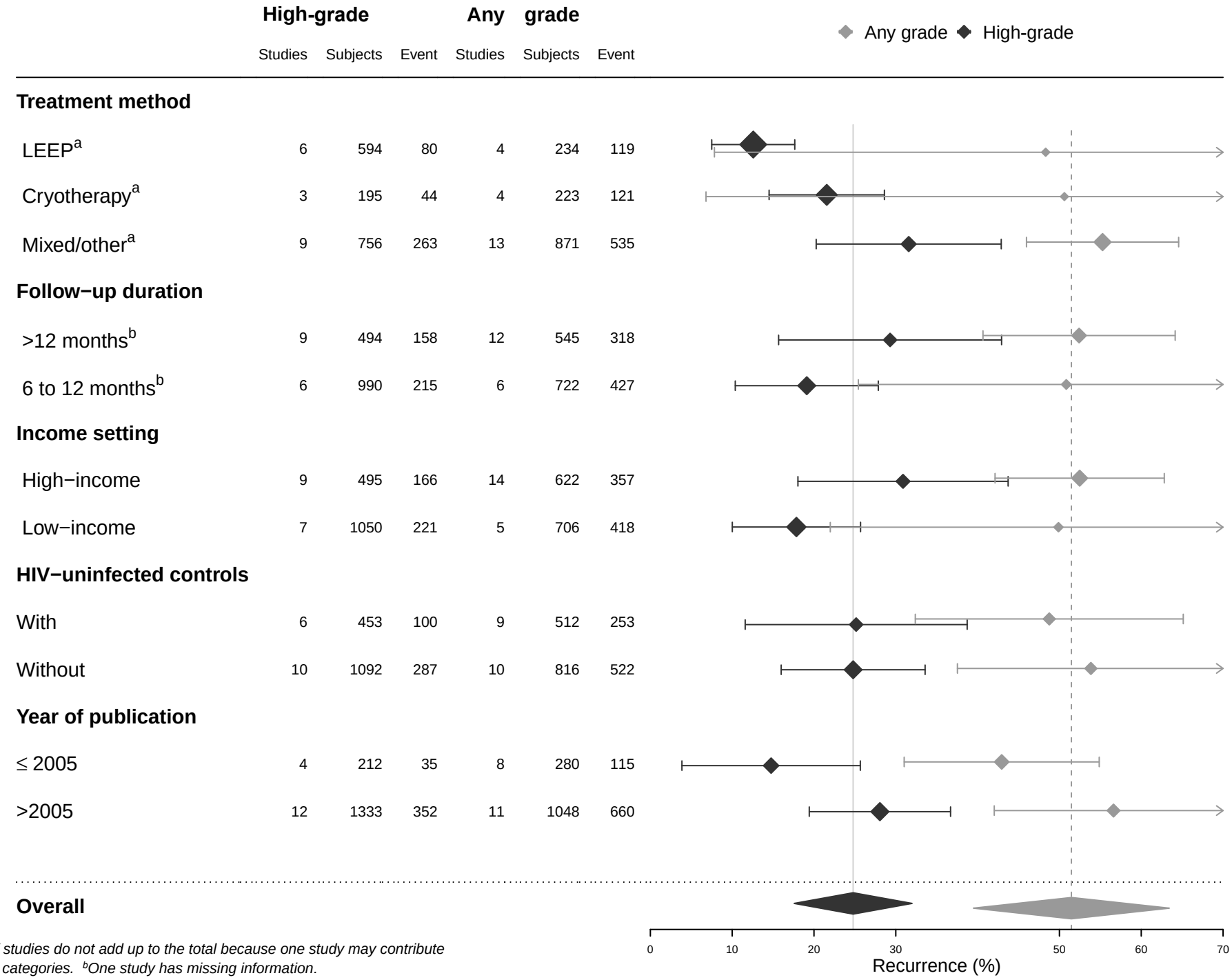
Supplementary Figure S1. Post-treatment prevalence of cervical lesions in HIV-infected women treated for ≥CIN2/HSIL, by sub-group.



[a]Number of studies do not add up to the total because one study may contribute to multiple categories. [b]One study has missing information.

Abbreviations: LEEP, loop electrosurgical excision procedure; Mixed/other, use of different treatments among cryotherapy, thermal ablation or LEEP and/or of other treatment.

Supplementary Figure S2. Funnel plots for meta-analysis of post-treatment lesions in HIV-infected versus uninfected women (left: any grade lesion, right: high-grade lesion).