



High levels of antibodies against merkel cell polyomavirus identify a subset of patients with merkel cell carcinoma with better clinical outcome.

Submitted by Maxime Fleury on Wed, 11/26/2014 - 12:35

Titre	High levels of antibodies against merkel cell polyomavirus identify a subset of patients with merkel cell carcinoma with better clinical outcome.
Type de publication	Article de revue
Auteur	Touzé, Antoine [1], Le Bidre, Emmanuelle [2], Laude, Hélène [3], Fleury, Maxime [4], Cazal, Raphaël [5], Arnold, Françoise [6], Carlotti, Agnès [7], Maubec, Eve [8], Aubin, François [9], Avril, Marie-Françoise [10], Rozenberg, Flore [11], Tognon, Mauro [12], Maruani, Annabel [13], Guyetant, Serge [14], Lorette, Gérard [15], Coursaget, Pierre [16]
Editeur	American Society of Clinical Oncology
Type	Article scientifique dans une revue à comité de lecture
Année	2011
Langue	Anglais
Date	2011 Apr 20
Pagination	1612-9
Volume	29
Titre de la revue	J Clin Oncol
ISSN	1527-7755
Mots-clés	Adult [17], Aged [18], Aged, 80 and over [19], Antibodies, Viral [20], Capsid Proteins [21], Carcinoma, Merkel Cell [22], Case-Control Studies [23], Chi-Square Distribution [24], Disease-Free Survival [25], Enzyme-Linked Immunosorbent Assay [26], Female [27], France [28], Humans [29], Kaplan-Meier Estimate [30], Lymphatic Metastasis [31], Male [32], Middle Aged [33], Neoplasm Staging [34], Polyomavirus [35], Predictive Value of Tests [36], Prognosis [37], Proportional Hazards Models [38], Prospective Studies [39], Risk Assessment [40], Risk Factors [41], RNA, Viral [42], Skin Neoplasms [43], Time Factors [44], Tumor Markers, Biological [45], Up-Regulation [46]

PURPOSE: A new human polyomavirus, Merkel cell polyomavirus (MCV), was identified in 2008 in tumor tissue of patients with Merkel cell carcinoma (MCC), a relatively rare human skin cancer. In this study, we investigated patients with MCC and controls for the presence of antibodies against MCV and their association with clinical characteristics.

PATIENTS AND METHODS: Antibodies against MCV were investigated by enzyme-linked immunosorbent assay in 68 patients with MCC and 82 controls using VP1 virus-like particles produced in insect cells.

RESULTS: Antibodies against MCV were detected in all patients with MCC and in 85% of controls. However, high antibody titers (> 10,000) were rarely observed in controls (7.3%) and they were detected in 64.7% of patients with MCC ($P < .001$) in contrast to the absence of VP1 expression in tumor samples. In addition, the geometric mean titer of anti-MCV in patients with MCC was around 14 times higher than that observed in MCV-positive controls ($P < .001$) and was not correlated with tumor viral load. High antibody titers were not found to be associated with any subject or tumor characteristics, but better progression-free survival was observed in patients with high antibody titers (hazard ratio, 4.6; 95% CI, 1.7 to 12.2; $P = .002$).

CONCLUSION: High titers of MCV antibodies in a much higher proportion of patients with MCC than in controls confirmed the association between MCV infection and MCC. The findings also indicated that a better progression-free survival occurred in patients with high MCV antibody titers and suggested that there are at least two distinct etiologic causes of MCC.

Résumé en
anglais

URL de la notice	http://okina.univ-angers.fr/publications/ua5542 [47]
DOI	10.1200/JCO.2010.31.1704 [48]
Lien vers le document	http://jco.ascopubs.org/content/29/12/1612.full.pdf+html [49]
Autre titre	J. Clin. Oncol.
Identifiant (ID) PubMed	21422439 [50]

Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=9256](http://okina.univ-angers.fr/publications?f[author]=9256)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=9271](http://okina.univ-angers.fr/publications?f[author]=9271)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=9272](http://okina.univ-angers.fr/publications?f[author]=9272)
- [4] <http://okina.univ-angers.fr/maxime.fleury/publications>
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=9273](http://okina.univ-angers.fr/publications?f[author]=9273)
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=9274](http://okina.univ-angers.fr/publications?f[author]=9274)
- [7] [http://okina.univ-angers.fr/publications?f\[author\]=9275](http://okina.univ-angers.fr/publications?f[author]=9275)
- [8] [http://okina.univ-angers.fr/publications?f\[author\]=9276](http://okina.univ-angers.fr/publications?f[author]=9276)
- [9] [http://okina.univ-angers.fr/publications?f\[author\]=9277](http://okina.univ-angers.fr/publications?f[author]=9277)
- [10] [http://okina.univ-angers.fr/publications?f\[author\]=9278](http://okina.univ-angers.fr/publications?f[author]=9278)
- [11] [http://okina.univ-angers.fr/publications?f\[author\]=9279](http://okina.univ-angers.fr/publications?f[author]=9279)
- [12] [http://okina.univ-angers.fr/publications?f\[author\]=9280](http://okina.univ-angers.fr/publications?f[author]=9280)
- [13] [http://okina.univ-angers.fr/publications?f\[author\]=9281](http://okina.univ-angers.fr/publications?f[author]=9281)
- [14] [http://okina.univ-angers.fr/publications?f\[author\]=9282](http://okina.univ-angers.fr/publications?f[author]=9282)
- [15] [http://okina.univ-angers.fr/publications?f\[author\]=9283](http://okina.univ-angers.fr/publications?f[author]=9283)
- [16] [http://okina.univ-angers.fr/publications?f\[author\]=9260](http://okina.univ-angers.fr/publications?f[author]=9260)
- [17] [http://okina.univ-angers.fr/publications?f\[keyword\]=1002](http://okina.univ-angers.fr/publications?f[keyword]=1002)
- [18] [http://okina.univ-angers.fr/publications?f\[keyword\]=1072](http://okina.univ-angers.fr/publications?f[keyword]=1072)

- [19] [http://okina.univ-angers.fr/publications?f\[keyword\]=1531](http://okina.univ-angers.fr/publications?f[keyword]=1531)
- [20] [http://okina.univ-angers.fr/publications?f\[keyword\]=10161](http://okina.univ-angers.fr/publications?f[keyword]=10161)
- [21] [http://okina.univ-angers.fr/publications?f\[keyword\]=10162](http://okina.univ-angers.fr/publications?f[keyword]=10162)
- [22] [http://okina.univ-angers.fr/publications?f\[keyword\]=10176](http://okina.univ-angers.fr/publications?f[keyword]=10176)
- [23] [http://okina.univ-angers.fr/publications?f\[keyword\]=10177](http://okina.univ-angers.fr/publications?f[keyword]=10177)
- [24] [http://okina.univ-angers.fr/publications?f\[keyword\]=10041](http://okina.univ-angers.fr/publications?f[keyword]=10041)
- [25] [http://okina.univ-angers.fr/publications?f\[keyword\]=10178](http://okina.univ-angers.fr/publications?f[keyword]=10178)
- [26] [http://okina.univ-angers.fr/publications?f\[keyword\]=9176](http://okina.univ-angers.fr/publications?f[keyword]=9176)
- [27] [http://okina.univ-angers.fr/publications?f\[keyword\]=1075](http://okina.univ-angers.fr/publications?f[keyword]=1075)
- [28] [http://okina.univ-angers.fr/publications?f\[keyword\]=1334](http://okina.univ-angers.fr/publications?f[keyword]=1334)
- [29] [http://okina.univ-angers.fr/publications?f\[keyword\]=991](http://okina.univ-angers.fr/publications?f[keyword]=991)
- [30] [http://okina.univ-angers.fr/publications?f\[keyword\]=8573](http://okina.univ-angers.fr/publications?f[keyword]=8573)
- [31] [http://okina.univ-angers.fr/publications?f\[keyword\]=10179](http://okina.univ-angers.fr/publications?f[keyword]=10179)
- [32] [http://okina.univ-angers.fr/publications?f\[keyword\]=968](http://okina.univ-angers.fr/publications?f[keyword]=968)
- [33] [http://okina.univ-angers.fr/publications?f\[keyword\]=5941](http://okina.univ-angers.fr/publications?f[keyword]=5941)
- [34] [http://okina.univ-angers.fr/publications?f\[keyword\]=10180](http://okina.univ-angers.fr/publications?f[keyword]=10180)
- [35] [http://okina.univ-angers.fr/publications?f\[keyword\]=10181](http://okina.univ-angers.fr/publications?f[keyword]=10181)
- [36] [http://okina.univ-angers.fr/publications?f\[keyword\]=7543](http://okina.univ-angers.fr/publications?f[keyword]=7543)
- [37] [http://okina.univ-angers.fr/publications?f\[keyword\]=1341](http://okina.univ-angers.fr/publications?f[keyword]=1341)
- [38] [http://okina.univ-angers.fr/publications?f\[keyword\]=10182](http://okina.univ-angers.fr/publications?f[keyword]=10182)
- [39] [http://okina.univ-angers.fr/publications?f\[keyword\]=6044](http://okina.univ-angers.fr/publications?f[keyword]=6044)
- [40] [http://okina.univ-angers.fr/publications?f\[keyword\]=7859](http://okina.univ-angers.fr/publications?f[keyword]=7859)
- [41] [http://okina.univ-angers.fr/publications?f\[keyword\]=6041](http://okina.univ-angers.fr/publications?f[keyword]=6041)
- [42] [http://okina.univ-angers.fr/publications?f\[keyword\]=8583](http://okina.univ-angers.fr/publications?f[keyword]=8583)
- [43] [http://okina.univ-angers.fr/publications?f\[keyword\]=10183](http://okina.univ-angers.fr/publications?f[keyword]=10183)
- [44] [http://okina.univ-angers.fr/publications?f\[keyword\]=6070](http://okina.univ-angers.fr/publications?f[keyword]=6070)
- [45] [http://okina.univ-angers.fr/publications?f\[keyword\]=8342](http://okina.univ-angers.fr/publications?f[keyword]=8342)
- [46] [http://okina.univ-angers.fr/publications?f\[keyword\]=1116](http://okina.univ-angers.fr/publications?f[keyword]=1116)
- [47] <http://okina.univ-angers.fr/publications/ua5542>
- [48] <http://dx.doi.org/10.1200/JCO.2010.31.1704>
- [49] <http://jco.ascopubs.org/content/29/12/1612.full.pdf+html>
- [50] <http://www.ncbi.nlm.nih.gov/pubmed/21422439?dopt=Abstract>

Publié sur *Okina* (<http://okina.univ-angers.fr>)