How to prepare and present your first poster at a congress

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No disclosures to declare.
Poster presentations are awesome!!!

- Great opportunity to get involved with scientific presentations
  - Active participation opens more funding possibilities
- More scientific interaction compared to oral presentation – if actively presented
How to get the opportunity?

• Apply!
• National vs. international conference
• Plan in advance – deadlines help to finish – 1 year
Get started with your poster design

- Size guidelines differ between every congress/ US vs. Europe!
  - Co-operate identify from your university
    - Ask e.g. media service for template

INSTRUCTIONS FOR POSTER PRESENTERS

The ESMO 2017 Congress organisers look forward to seeing your poster on display during the meeting and thank you in advance for your co-operation in following these guidelines:

- The size of the poster must be 190 cm wide by a maximum of 90 cm high. Presentation format is horizontal format. The recommended poster size is 190cm x 90cm. The maximum poster size is 191.5 cm width x 93.5 cm height, as this is the maximum usable area of the poster boards.
- An optimal lay-out of your poster will attract attention of other Congress delegates. Text should be easy to read at a distance of 1 metre. Use colour wherever possible.
- You must include all material to support your presentation, such as tables, drawings, charts and pictures.

Poster Guidelines

Regular Poster Size Limitations: No larger than 47 inches high and 95 inches wide (120 cm high by 240 cm wide). This is the size of the poster board. Do NOT exceed the size of the poster board.

Tricks in Progress Poster Size Limitations: No larger than 42 inches high and 42 inches wide (107 cm high by 107 cm wide). This is half the size of the poster board. You will be sharing the posterboard so please do NOT exceed the size limitations.

Suggestions for Formatting Your Poster

- Format of poster is LANDSCAPE (horizontal).
- Place heading in large-sized type at the top of the board.
- List the title and all authors.
- All material should be readable from distances of three feet or more.
- You are strongly encouraged to use a type that is at least 3/8 inches high (22 pt. minimum).
- Use bold type to ensure legibility.
- Make all print very dark (preferably block style) on a very light (preferably white) background.
- Use letters, arrows, numbers, or other devices to show those who will be viewing your poster the preferred sequence in which your poster should be reviewed.
- Charts, drawings, and illustrations should be similar to those you would use in making power point slides.
- If photographs are used, have them processed with a matte or dull finish.
- Please clearly print one email address on your poster for attendees to refer to should they have any questions or comments at a time when you are not standing with your poster. If you do not wish to print your own email address, please list another email address for an appropriate contact person for your abstract.
Get started with your poster design

- Co-operate identify from your university
  - Ask e.g. media service for template
Get started with your poster design

- FIGURES!!!
  - Main message as eye catcher in the middle of your poster

- Little text as possible

- Handouts?

- Have contact details of the corresponding author on the poster
Background

Brain metastases (BM) are an increasing challenge in modern oncology. Up to 40% of all patients suffering from a metastatic cancer develop BM, which causes disease. Knowing more about the underlying mechanisms of BM: outgrowth and formation could help to find new molecular targets in the development of new systemic treatments and BM prevention strategies.

The integrin family is associated with the involvement in several cell functions in physiological as well as in pathological conditions.

Methods

Patients treated with neurological resection of BM from histologically proven lung cancer between 1990 and 2010 (identified from the Neuro- Biobank) were included. Diagnosis-specific grade prognostic assessment is based on age, number of BM, Karnofsky performance scores, status of systemic disease and survived data. Clinical data were obtained by chart review.

Immunohistochemical analysis for avβ3, avβ5 and avβ6 integrin subunits were performed and correlated with KDR and tyrosine-inducible factor (FFP) as indexes. To quantify the intensity and extent of integrin expression on tumor cells used the IR score.

The IR score consists of the intensity of numerous staining (weak, moderate, or intense) multiplied by the percentage of cells showing a specific staining with a class in a microenvironment immunoactivity. Further, avβ3, avβ5 and avβ6 integrin expression on endothelial cells and tumor stroma was evaluated separately and reported as either present or absent.

Results

195 BM specimens of 165 patients with histologically confirmed lung cancer (172 non-small cell lung cancer and 19 small cell lung cancer) were included. In 180 patients matched primary tumor samples were available. avβ3 expression was commonly found on tumor cells and showed a significant association with low KDR proliferation indices and favorable survival times. avβ5 expression was high on vascular structures and tumor stroma and associated with high KDR and alpha indices. avβ6 expression was more frequent found on vascular structures and avβ3 in non-small cell tumor and its expression in BM correlated with high KDR indices.

Discussion

Integrin signalling plays a leading role in metastasis and angiogenesis. In this integrin might be an attractive component for the systematic therapy or prevention of BM.

Discussion

Integrin expression have been applied in other clinical indications such as cardiovascular diseases, Multiple Sclerosis and multiple sclerosis. Demographic data show promising results in oncology. Integrin expression has been shown to have a significant association with low KDR proliferation indices and favorable survival times. avβ3 expression was high on vascular structures and tumor stroma and associated with high KDR and alpha indices. avβ6 expression is associated with pathological parameters, such as the KDR tumor cell proliferation index and avβ6 and may have an impact on survival in patients with NSCLC BM.

Expression of avβ integrins could be of pathological and clinical relevance in patients with NSCLC BM. Further investigations of their involvement in the brain metastatic cascade and their role in biomarkers are warranted.

Discussion

According to the WHO classification of haemopoietic and lymphoid tissues, BM are well-differentiated tumours around the surrounding brain parenchyma. Further, we showed that BM with a small number of proliferative Ki67+ cells are more likely to be described as infiltrative growing and lacking a clear tumour border towards the microsclerotic stroma of the tumour.

We aimed to systematically investigate the infiltration pattern and the associated expression of adhesion molecules in a well-defined series of patients with BM. We performed a detailed analysis of avβ3 expression in BM.

Methods

160 patients with histologically proven BM who underwent brain surgery between 1987 and 2011 were identified from Neuroradiology and the Medical University of Vienna.

57 patients of BM primary tumor: 27 lung cancer, 8 breast cancer, 8 melanoma, 5 colorectal cancer, 1 kidney cancer, 13 other

Histopathological evaluation with regard to the invasion pattern into the surrounding brain parenchyma.

Expression of the following integrins was evaluated using immunocytochemistry with mouse antibodies: avβ1, avβ3, avβ6, avβ8 and avβ9.

Strong, complete membranous staining was defined as Ki67 positive. Demographic data was collected from chart review.

Discussion

We observed three main invasion patterns:

- well-differentiated (20,57, 31, Figure 1a) vascular and avβ3 expression, avβ3 diffusion infiltration (19,7, 32, Figure 1c)

There was no association of invasion pattern with primary tumor type, although vascular co-option was most common in melanomas (40, 40).

avβ3 and avβ6 were immunohistochemically expressed in tumor (avβ3: 93,5%, avβ6: 83,5%)

avβ6 was associated with a higher expression of avβ3 expression (11%) expression on tumor cells.

Discussion

We delineate three distinct invasion pattern terms BM into the brain parenchyma: well-differentiated group, vascular co-option, diffuse infiltration.

Our findings are in line with some previous finding indicating that not all BM grow well differentiated towards the surrounding brain parenchyma. Preclinical mouse models postulate that melanoma growth rather vascular co-option while BM of non small-cell lung cancer tend to grow well-differentiated.

We study the first to systematically investigate the invasion pattern of BM. We conducted a unique series of autopsy specimens, as the invasion front of BM can only be studied in autopsy specimens due to the lack of a reaction margin in BM reaction specimens.

Further, we could show differences in the expression of adhesion molecules between the invasion patterns. However, studies on larger series of BM reaction specimens are necessary to evaluate the potential of anti-integrin therapy in patients with BM.
Association of tumor infiltrating lymphocytes with brain edema and overall survival in brain metastases

Matthias Preuresser (1,2), Anna S. Berghoff (1,2), Elisabeth Fuchs (2,3), Gerda Ricken (2,3), Ayseguel Illhan-Muflu (1,2), Manuel Magerle (1,2), Thomas Spanberger (1,2), Adelheid Wohrer (2,3), Monika Hackl (4), Josef Pichler (5), Markus Hutterer (6,7), Georg Widdershans (2,8), Karin Diekmann (2,9), Peter Birner (2,10), Daniela Prayer (2,11), Johannes A. Hainfellner (2,3), Christoph C. Zielinski (1,2), Rupert Bartsch (1,2)

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BACKGROUND

1 med XI cells are the main effector cells of the antitumor adaptive immune response.

Density of tumor infiltrating lymphocytes (TILs) plays a prognostic impact in various metastatic solid cancers.

We observed dense TIL infiltration in the majority of investigated BM. High density was more frequently observed for CD3+ and CD8+ and PD-L1+ TILs than for the immunosuppressive FOXP3+ TILs. Lung cancer, renal cell carcinoma and melanoma presented more frequently with dense TIL infiltration compared to the other primary tumors.

A response rate for up to 30% was shown for ilipilimab in patients with melanoma brain metastases, indicating that despite the immune-privilege of the brain, immune checkpoint inhibitors have therapeutic impact in patients with brain metastases [5, 6].

REFERENCES

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High CD3+, CD8+ and PD-L1+ TIL density was associated with improved survival, as previously described for extracranial tumors. On the other hand, high FOXP3+ TIL density was associated with impaired survival. This can be explained by the immunosuppressive properties of FOXP3+ TILs and was previously observed in extracranial malignancies.

High CD8+ TIL density was associated with large peritumoral edema. In a previous study, we showed that patients with large edema have an improved survival prognosis compared to patients with small peritumoral edema. Future studies should further investigate the correlation of imaging and tissue based characteristics.

Immune checkpoint inhibitors have shown clinical meaningful response rates in frequent primary tumors of brain metastases like lung cancer and melanoma [2, 3]. TIL density is under discussion as a predictive marker for response to immune checkpoint inhibitors [4].

Future studies should investigate the therapeutic impact of immunomodulatory agents in patients with brain metastases. We observed dense TIL infiltration in the majority of investigated BM. High density was more frequently observed for CD3+, CD8+ and PD-L1+ TILs than for the immunosuppressive FOXP3+ TILs. Lung cancer, renal cell carcinoma and melanoma presented more frequently with dense TIL infiltration compared to the other primary tumors.

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• Get the attention of the attendees – you want to present your data!!!
• Stand next to your poster as much time as possible
• Get the attention actively – ask to give a poster walk!
• Have a 1-3 Minute walk
  – only highlighting the most important points prepared
  – get the audience
• Every visitor could be a future reviewer!
Association of tumor infiltrating lymphocytes with brain edema and overall survival in brain metastases

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BACKGROUND

T cells are the main effector cells of the immune system to adaptively immune response.

RESULTS

Table 1: Patient characteristics. Entire population (n=118)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Entire population (n=118)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age of diagnosis of BM, years (range)</td>
<td>66 (26-88)</td>
</tr>
<tr>
<td>Karnofsky</td>
<td>70 (10-100)</td>
</tr>
<tr>
<td>Graded prognostic assessment class</td>
<td>24 (1-5)</td>
</tr>
<tr>
<td>Visual metastases at diagnosis of BM, n</td>
<td>78 (66.6)</td>
</tr>
<tr>
<td>Overall treatment for BM</td>
<td>58 (49.6)</td>
</tr>
<tr>
<td>Overall survival from diagnosis of BM, months (range)</td>
<td>12 (0-118)</td>
</tr>
</tbody>
</table>

METHODS

We observed dense TIL infiltration in the majority of investigated BM. High density was more frequently observed for CD3+, CD8+ and CD4+ TILs than for the immunosuppressive FOXP3+ TILs. Lung cancer, renal cell carcinoma and melanoma presented more frequently with dense TIL infiltration compared to the other primary tumors.

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Future studies should investigate the therapeutic impact of immunomodulatory agents in patients with brain metastases.
Visit other posters!

• Get involved with other colleagues
• Dare to ask questions – there are no stupid questions
• Take the opportunity to learn new stuff – don’t be afraid of not knowing scientific details!
Summary

- Apply for conferences
- Figure should be the major focus of your poster
- Present your poster actively to other participants
- Enjoy your poster presentation!
Thank you for your attention!

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