



# KDL DermPath Update

Dedicated to Providing Superior Diagnostics

## KDL Utilizes Digital Images to Ensure Quality Diagnostics

### Clinical Photographs Improve Diagnostics

Precise histopathologic diagnosis of skin biopsy samples is aided by the knowledge of a patient's clinical information. This data includes historical facts, clinical laboratory results and physical findings. In our busy medical practices, it is difficult to convey this information in a pathology requisition. Digital photography allows the unique opportunity to convey physical findings.

Several publications have documented the utility of clinical photographs in dermatopathology. Fogelberg et al. found clinical digital images helpful in confirming the initial diagnosis in 43% of inflammatory condition cases and were able to use the images to narrow the differential diagnosis in 31% of cases. In a study by Ceroni et al., after evaluation of the clinical images, the number of dermatopathologists making a correct diagnosis was increased in 70 cases, unchanged in 25 cases, and decreased in 5 cases. The total number of correct diagnoses increased from 332 (diagnoses before evaluation of clinical pictures) to 481 (diagnoses after evaluation of clinical pictures), with a 16.6% increase in the total.

Clinical photographs of skin lesions also allow for additional specimen identification. In addition, images of skin lesions are invaluable for teaching medical students and residents and for publications.

The dermatopathologists at KDL work closely with clinicians to provide the best possible patient care,

and KDL now routinely receives clinical photographs of skin conditions from practitioners submitting skin biopsies. The images come as prints attached to the pathology requisition or via email. We appreciate receiving the clinical photographs, and the images have been very helpful in evaluating biopsies from these patients.

### KDL Digital Image Services

The KDL website has a portal by which digital clinical photographs may be uploaded directly to the laboratory pathologist in a completely secure manner. KDL is committed to patient confidentiality, and all images are stored in compliance with both HIPAA and laboratory accreditation standards (CAP and CLIA). All servers are hosted at KDL (no third party encryption).

Upon upload, images of patients' skin lesions are attached to the patients' pathology reports in the KDL laboratory information system. The images appear both in printed reports and in reports viewed over the secure, web-based KDL online reporting system, Hypercharts. (Images may not transmit to some EMR systems).

KDL has full capability for photomicrography. As an added service to our clients, we sometimes attach photomicrographs of interesting or unusual cases, or when clinical images are sent by the ordering physician. If you would like photomicrographs of a skin biopsy, please inform one of our dermatopathologists.

(continued)

## References

1: Fogelberg A, Ioffreda M, Helm KF. The utility of digital clinical photographs in dermatopathology. *J Cutan Med Surg.* 2004 Mar-Apr; 8(2):116-21. Epub 2004 May 4. PubMed PMID: 15685389.

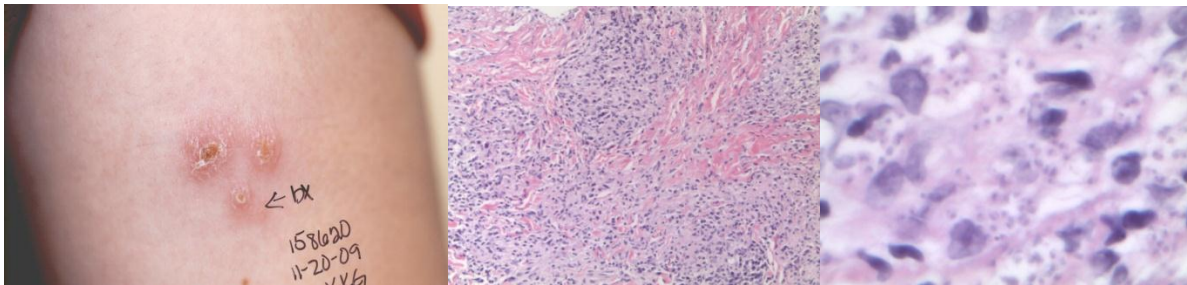
2: Cerroni L, Argenyi Z, Cerio R, Facchetti F, Kittler H, Kutzner H, Requena L, Sanguenza OP, Smoller B, Wechsler J, Kerl H. Influence of evaluation of clinical pictures on the histopathologic diagnosis of inflammatory skin disorders. *J Am Acad Dermatol.* 2010 Oct; 63(4): 647-52. PubMed PMID: 20846566

3: Kutzner H, Kempf W, Schäfer L, Requena L. Optimizing dermatopathologic diagnosis with digital photography and internet. The significance of clinicopathologic correlation. *Hautarzt.* 2007 Sep; 58(9): 760-8. Review. German. PubMed PMID: 17710378.

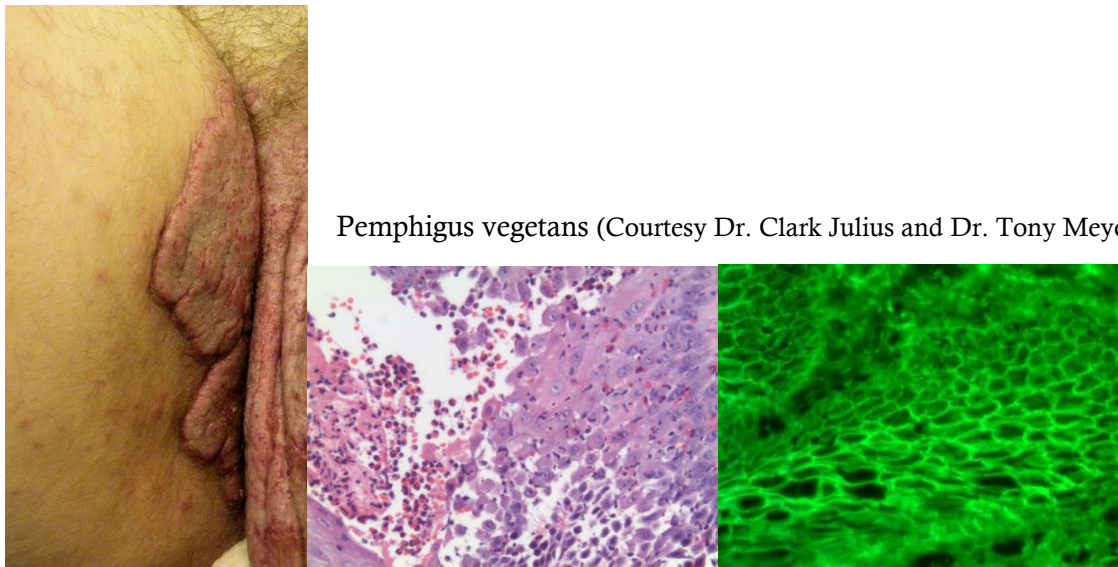
## Instructions for Secure Uploading of Digital Photographs to KDL via Internet

1. Access KDL website address at [www.labpath.com](http://www.labpath.com)
2. Locate "KDL quicklinks" textbox on the left-hand side of the screen
3. Click on "Image Upload"
4. Complete the information in the "Image Upload" fields. You may attach up to five images on the form
5. If you need assistance, please contact [rcoe@labpath.com](mailto:rcoe@labpath.com)

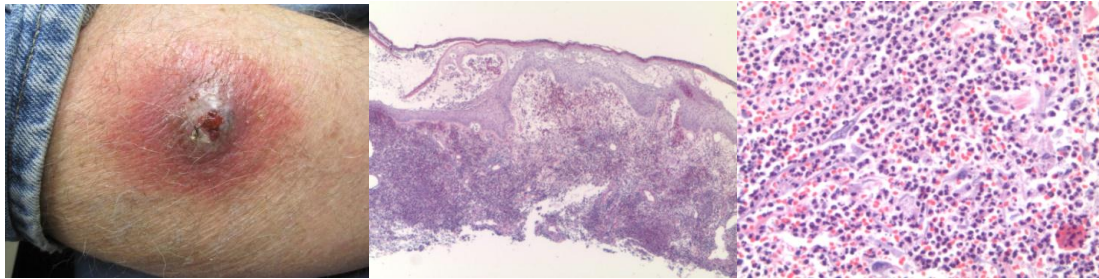
## Illustrative Cases of Client Digital Images, KDL Histopathology and Diagnosis



Leshmaniasis (Courtesy Dr. Kimberly Grande)



Pemphigus vegetans (Courtesy Dr. Clark Julius and Dr. Tony Meyers)



Pyoderma gangrenosum (Courtesy Dr. Sam Fulk)

## KDL One Source Services

### *Diagnostics*

- Pathology evaluation of skin and mucosa biopsies and excisions (including oral and genital)
- Margin evaluation (including frozen sections)
- Immunohistochemistry and special stains
- Immunofluorescence studies (including blistering diseases, lupus erythematosus, and vasculitis)
- Infectious diseases
- Molecular analyses available (including lymphoma differential diagnosis/workup, gene rearrangement, EM, and flow cytometry)

### *Services*

- Custom interface available with Your EMR
- Secure online access to reports (Hypercharts)
- Pre-printed requisitions with barcoded labels for specimen/practice identification
- Patient education materials available
- Collection kits provided
- Regional couriers
- Slide Preparation
- Melanoma cases reported for physicians to the TN Cancer Registry

## Referrals

KDL is preferred by doctors across the country

- Second opinions on biopsy results
- Consultations on difficult or unusual cases

## KDL RapidResults™ Testing Services

- Same day skin biopsy services available
- Margin evaluations, same day available
- Emergency STAT testing

## KDL Board-certified Dermatopathologists

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# KDL Pathology

Dedicated to Providing Superior Diagnostics

KDL is dedicated to providing quality surgical pathology services to physicians treating skin diseases.

Diagnostic interpretations are performed by fellowship-trained dermatopathologists, certified by the American Boards of Dermatology and Pathology.

## Services:

- Evaluation of skin biopsies/excisions
- Second opinions on biopsies
- Slide preparation available
- Regional couriers
- Immunofluorescence
- Immunohistochemistry
- Expert consultation on problem cases
- Web reporting/available interface with EMR



Paul B. Googe, M.D., Founder and Laboratory Director of KDL, is board certified in dermatopathology and anatomic pathology. A native of Knoxville, TN, he completed his post-graduate training in pathology and dermatopathology at Massachusetts General Hospital in Boston, MA following medical school and an internal medicine internship at The University of Tennessee College of Medicine. Dr. Googe has practiced dermatopathology for over 20 years and holds volunteer faculty appointments as Clinical Professor of Pathology at The University of Tennessee Graduate School of Medicine and Vanderbilt University.



## KDL Pathology

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