



NTP Nonneoplastic Lesion Atlas

Spleen – Erythrophagocytosis

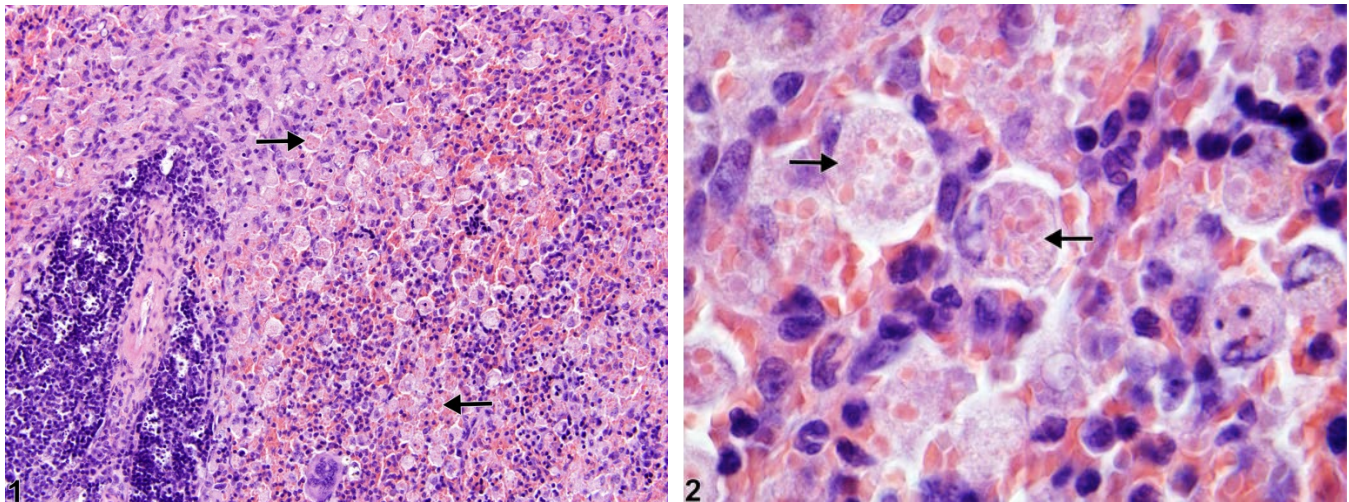


Figure Legend: **Figure 1** Spleen - Erythrophagocytosis in a male B6C3F1/N mouse from a chronic study. Numerous macrophages (arrows) within the splenic red pulp contain intracytoplasmic erythrocytes. **Figure 2** Spleen - Erythrophagocytosis in a male B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). Macrophages contain intracytoplasmic erythrocytes and eosinophilic cellular debris (arrows).

Comment: Erythrophagocytosis in the spleen consists of macrophages (mainly in the splenic red pulp) that phagocytize extravasated, old, and/or damaged erythrocytes (Figure 1 and Figure 2, arrows). Splenic erythrophagocytosis can be increased in such conditions as chronic congestion or hemorrhage, treatment-related hemolytic anemia, or methemoglobinemia or secondary to the presence of malignant neoplasms.

Recommendation: Diagnose and grade erythrophagocytosis in the spleen if it is considered to be treatment related.

References:

National Toxicology Program. 2000. NTP TR-491. Toxicology and Carcinogenesis Studies of Methyleugenol (CAS No. 93-15-2) in F344/N Rats and B6C3F1 Mice (Gavage Studies). NTP, Research Triangle Park, NC.

Abstract: <http://ntp.niehs.nih.gov/go/10172>



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References:

Stefanski SA, Elwell MR, Stromberg PC. 1990. Spleen, lymph nodes, and thymus. In: Pathology of the Fischer Rat: Reference and Atlas (Boorman GA, Eustis SL, Elwell MR, Montgomery CA, MacKenzie WF, eds). Academic Press, San Diego, 369-394.

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Authors:

Kristen Hobbie, DVM, PhD
Principal Pathologist
Huntingdon Life Sciences
Peterborough, UK

Susan A. Elmore, MS, DVM, DACVP, DABT, FIATP
Staff Scientist, NTP Pathologist
NTP Pathology Group
National Toxicology Program
National Institute of Environmental Health Sciences
Research Triangle Park, NC

Holly M. Kolenda-Roberts, DVM, PhD, DACVP
Veterinary Pathologist
SNBL USA
Everett, WA