



*Environmental Diagnostic Group Inc*  
*Environmental Pathology, Toxicology & Biochemistry*

## Pathology Report

Issued: 4/28/09 ID# MR00015708

Subject Name: Grasso, Anthony J.

Specimen #: S-09-05985

DOB: 10/29/1948

Sex: M

**Date Collected:** 4/07/2009

**Date Received:** 4/09/2009

**Attending Doctor:** Dr. Ryan Aldrich

**Specimen Identification:** Skin biopsy, right lateral thigh.

**Clinical History:** Anthony J. Grasso, has been exposed to Toxic Fungi within his work area of the Police Station.

**Gross:** The specimen, labeled skin for H and E and slide prep only, measures 0.4 x 0.4 x 0.3 cm, completely submitted in one cassette.

### Microscopy: One Specimen

- There is a moderate amount of basket-weave fibrinous inflammation observed on the epidermal surface in a uniform application.
- There is thickening of the epidermis of between 7-9 cells thick.
- There is hyaline-appearing fibrinous inflammation just beneath the basement membrane and it continues well into the deep dermis, demonstrating the classic fingerprint of moderate chronic exposure of approximately two or more years in duration to Trichothecene Mycotoxins.
- Several arteries are partially occluded with fibrinous inflammation or exudates, which is typical of all arteries of the body, and consistent with severe poisoning of the Trichothecene Mycotoxins. There are 19 microns of fibrin deposited within these arteries.
- The fibrinous inflammation is also indicative of ongoing ambient inhalation exposure to highly poisonous Trichothecene Mycotoxins. The uniform reaction to

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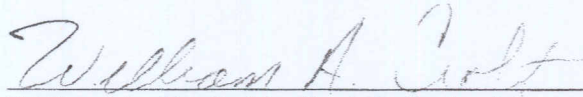
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the dermis observed is consistent with fungal vapors of Trichothecene Mycotoxins.

- Yeast organisms are observed within the artery wall indicating systemic infection.
- Fibrinous inflammation is formed in the body when exposed to Trichothecene Mycotoxins. The fingerprint is highly specific and no other chemical exposure will cause this.
- The stage of progression of this chemical poisoning is evaluated as **Late Stage II**.

## Diagnosis

The pathology clearly demonstrates severe chronic poisoning for approximately two or more years in duration to **Late Stage II** from exposure to highly irritating epoxides, Trichothecene Mycotoxins via vapors, dermal contact and inhalation, which is consistent with the formation and progression of the disease called Trichothecene Mycotoxicosis.



William A. Croft, Medical Pathologist

## Significance of Tissue Biopsy

**Anthony J. Grasso** clearly demonstrates cellular poisoning to the extent of **Late Stage II** progression of the disease called Trichothecene Mycotoxicosis within his body. The severity of the fibrinous inflammation in the arteries observed within the skin is indicative of the state of the rest of the arteries within the body. The integumentary (skin) is of substantial importance and can be used for diagnostic purposes<sup>1 2</sup>.

The highly **poisonous epoxide chemicals** react systemically, in other words, with all the body's organs and systems, in a generalized diffuse fashion in a stealth manner. By examination of arteries in one organ, a clear picture is available of what will be present in other arteries and other organs with the same extent of damage.

The biology, pathology, and the fingerprint of Trichothecene Mycotoxicosis resulting from consumption, dermal exposure, and inhalation has been well-established in

<sup>1</sup> Pang, V. F., Schiefer B. H. and V. R. Beasley, "Effects on the Integumentary System. In" Trichothecene Mycotoxicosis: Pathophysiologic Effects, Volume II, CRC Press, Inc, Boca Raton, Florida, pp. Chapter 6, 123-134, 1998.

<sup>2</sup> Augerson, W. S. A Review of the Scientific Literature as it Pertains to Gulf War Illnesses, Volume 5: Chemical and Biological Warfare Agents, MR-1018/5-)SD, 2000 Rand.

humans and animals and has been widely reported<sup>3, 4, 5, 6, 7</sup> in the available medical and scientific literature.

There is significant evidence that points to moderate loss of tissue cells and fibrinous inflammation of the other major organs and systems: brain, lung, heart, liver, spleen, kidneys, pancreas and the gastrointestinal, cardiovascular, skeletal, reproductive, lymphatic and immune systems in humans after exposure to Trichothecene Mycotoxins. In most cases, the necrosis, or dead tissue cells from these organs will not be regenerated or replaced.

The reduction and eventual removal of the Trichothecene Mycotoxins that caused fibrinous inflammation indicating Mycotoxin exposure is of the utmost importance in the therapeutic approach of patients with this level of progression of the disease. In cases of continued exposure to the Trichothecene Mycotoxins the intestinal mucosa cannot regenerate and will slough leading to the starvation of the patients. Patients should be made aware of this health condition and attempt to remove themselves from contaminated environments. At this stage in the disease, without treatment of the affected systems, the prognosis is poor, and with therapy the prognosis is guarded to good. Major efforts must also be made to control yeast infection within the body, which is consistent with Trichothecene Mycotoxin exposure<sup>8</sup>.

- The patient should also be watched and monitored for development of cancer within the following organs: brain, spinal column, respiratory system, liver, spleen, kidney, urinary bladder, lymph nodes, thyroid, parathyroid, hormonal glands, including pituitary gland, gastrointestinal system, reproductive system including breast, pancreatic, skeletal, muscle and skin.

Monitor patient for fungal infection and yeast infection due to the severe immune depression.

<sup>3</sup> Croft, W. A., B. B. Jarvis and C. S. Yatawara: Airborne Outbreak of trichothecene toxicosis, *Atmospheric Environ.*, 20(3), 549-552 (1986).

<sup>4</sup> Forgacs, J., and W. T. Carll : Mycotoxicoses. Advances in Veterinary Science. Academic Press, New York and London, pp 273-372 (1962).

<sup>5</sup> Joffe, A. Z. : Alimentary toxic Aleukia. *Microbial toxins*, Vol. VII (Ed : S. Kadis, A. Ciegler and S.J. Ajl). pp. 139-189. Academic Press Inc., New York. (1971).

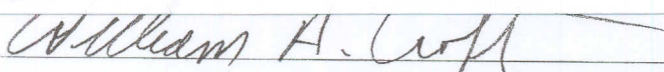
<sup>6</sup> Wannemacher, R. W. Jr. and S. L. Wiener : Chapter 34 Trichothecene mycotoxins, *In : Text Book of Military Medicine aspects of chemical and biological warfare*. pp 655-677 (1997).

<sup>7</sup> William A. Croft, Bonnie M. Jastromski, Amanda L. Croft and Henry A. Peters, Clinical confirmation of Trichothecene Mycotoxicosis in Patient Urine *J. of Envir. Biology*. 23(3) 301-320, (2002).

<sup>8</sup> Croft, W. A. and Gass, K., "The Pathology of Trichothecene Mycotoxicosis in Humans." American Environmental Health Foundation, Inc. Dallas, TX. Presented June 2008.

<sup>9</sup> Croft, W. A., and Gass, K., Therapeutic approach to Trichothecene Mycotoxicosis in Humans. American Environmental Health Foundation, Inc. Dallas, TX, Presented June 2008.

The opinions I have expressed in this case conform to the current body of peer reviewed scientific and medical literature, which is generally accepted as reliable in both the scientific and medical communities.



William A. Croft, Medical Pathologist

WAC/km

<sup>9</sup> McGinnis, M., Pathogenesis of Indoor Fungal Disease, *Medical Mycology*, 42, 107-117, 2004.  
<sup>10</sup> Public Law 107-188, sec. 123, 2002, "Final Rule"



September 16, 2008

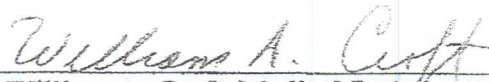
### Extraction of Clothing from Anthony Grasso:

One white shirt obtained on September 11, 2008 and processed on September 16, 2008, was placed into 2,000 mls of Ethyl Acetate, and 1,000 mls of tap water were used to extract item for Trichothecene Mycotoxins.

### Results:

The extraction of item recovered 5.0 mls of golden brown material <sup>1</sup> confirmed by thin layer chromatography <sup>2</sup> to be Trichothecene Mycotoxins. The Trichothecene Mycotoxins extracted from the item is a consistently similar fingerprint confirming Anthony's exposure to Trichothecene Mycotoxins from within his place of work. A very significant amount, approximately 500 parts per billion (PPB) of Trichothecene Mycotoxins, was detected. The LD/50 for adult humans is 500 ug/kg or 500 PPB/Kg. <sup>1,3</sup>. According to the USEPA children are 100 times more sensitive or 0.500 PPB/Kg.

These results indicate Anthony Grasso was exposed to Trichothecene Mycotoxins and based on the advancing signs and symptoms of his illness verify his disease as progressing Trichothecene Mycotoxicosis. <sup>3-7</sup> The pathology for Trichothecene Mycotoxicosis has been observed in animals and humans, including children, and correlates with the signs and symptoms. <sup>1,3,4,5,6</sup> Pathology is the basis of the study of disease in animals and humans. <sup>8</sup>

  
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- 1 Augerson, W. S. A Review of the Scientific Literature as it Pertains to Gulf War Illnesses. Volume 5: Chemical and Biological Warfare Agents, MR-1018/5-SD, 2000 Rand.
- 2 Pathre, S. V., and C. J. Mirocha: Assay Methods For Trichothecenes and Review Of Their Natural Occurrence. Mycotoxins in Human and Animal Health. Eds.: Roderick J.V., C.W. Hesseltine, and M. A. Mehlman. Pathotox Publishers, Park Forest South, Ill. Page 229-253 (1977)
- 3 Croft, W. A., Jastromski, B. M. Croft, A. L., and Peters, H. A., Clinical Confirmation of Trichothecene Mycotoxicosis in Patient Urine. J. of Environment Biol. 23 (3) 304-320. 2002.
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- 5 Croft, W. A., et al. Airborne Outbreak Of Trichothecene Toxicosis. Vol. 20, pp. 549-552. 1986.
- 6 Joffe A. A.,) Alimentary toxic Aleukia. In Microbial Toxins, Vol VIII, edited by Kadis S, Ciegler A, and Ajil S. J., Academic Press, Inc, New York, pp 139-189. 1971
- 7 Ueno Y. Trichothecene mycotoxins-mycology, chemistry, and toxicology. Adv. Nutr. Sci 3, 301-353, 1980.
8. Public Law 107-188, 2002. sec. 123.

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