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of autoimmune blistering diseases.
and the development of landmark therapies in the treatment
in recognition of his contributions to the pathogenesis

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Presented to

Walter F. Lever Memorial Lecture Award

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The Walter Lever Memorial Lecture Award
by
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Walter F. Lever, MD was one of the prominent dermatologists in the United States, during his professional life and thereafter. In the course of his career he made landmark contributions. His discoveries affected patients with blistering diseases then and even today. His legacy will last forever.

Dr. Lever was born in Germany in 1909. He initially studied in Heidelberg and got his medical degree from the University of Leipzig. Many young professionals were immigrating to the US because of political tensions in Europe. Dr. Lever was one of them. In 1936 he joined the Massachusetts General Hospital to do a residency in dermatology. He stayed there for 20 years working with a prominent focus in dermatopathology. In 1959 he became the Chief of the Dermatology Service at the Tufts University Medical School and subsequently the Chairman of the Department of Dermatology. He developed a strong research program that trained many young dermatologists who eventually became chairmen of many dermatology departments.

He wrote many books but the one that was most widely read and translated into 16 languages was Lever’s Textbook of Histopathology. Lever was the first person to describe bullous pemphigoid from pemphigus vulgaris, dermatitis herpetiformis and other blistering diseases. Hence from a clinical perspective and a scientific viewpoint Walter Lever laid the foundation stone for what subsequently emerged as a subspecialty of dermatology, namely immunodermatology, which is mainly autoimmune blistering diseases.

To commemorate this enormous milestone in the history of modern dermatology, and as a token of respect for one of the most illustrious Chairmen of the Department of Dermatology, this Memorial Lecture Award was created. It is given once in 25 years for one of the following reasons. There are few investigators in blistering diseases. Further the proof of the validity and benefit of any major advancement comes when there has been a lapse of a decade to prove its validity and international acceptance. Dr. Ahmed was cited for discovery of beta 4 and alpha 6 integrins in mucous membrane pemphigoid and for identifying the ability of the combination of intravenous immunoglobulin and rituximab in producing long-term, sustained remissions in autoimmune blistering diseases.

In 1983 Dr. Lever returned to Germany. He died on his birthday in 1992.
Addendum to Walter Lever Memorial Lecture Award description

There are two major discoveries that Dr. Ahmed made for which this award was given.

Autoimmune blistersing diseases are potentially fatal. Some of them have very catastrophic sequelae that significantly reduce the quality of life for the patients.

He was the first person to show that the use of intravenous immunoglobulin (IVIg) was a modality to treat these diseases. The importance of this lies in the fact that it was a major shift in the paradigm for treating these diseases. In the preceding 25 years the mainstay of therapy was high-dose, long-term use of systemic corticosteroids in conjunction with one of many immunosuppressive agents. This combination produced a large spectrum of side effects, some of which were the cause of death in these patients. This treatment was based on the theory that suppressing the immune system would result in the elimination of pathogenic autoantibodies and thus help treat the autoimmune diseases.

Dr. Ahmed produced a new paradigm which was diametrically opposite to immune suppression. By using IVIg his theory was that the diseases are best eliminated by immune enhancement and the restoration of immune regulation. These processes would result in the cessation of the production of pathogenic antibodies. Many patients treated by IVIg have been in remission without any drug for more than 25 years. Physicians in several countries have used his approach and found similar results. More recently he was one of the earliest physicians to show the benefits of rituximab. The main benefit was rapid control of active disease. However since rituximab did not influence immune regulation, he used the rituximab in combination with IVIg. Consequently the patients recovered from the blisters in a rapid manner and were able to eventually stay disease and drug-free for several years.

One of these blistersing diseases is called mucous membrane pemphigoid. The significant and devastating aspect of this disease is that as the blisters heal they cause irreversible scarring. It predominantly involves mucosal surfaces. When it affects the eye, 25% of the patients can become blind. Involvement of the larynx can result in sudden asphyxiation and death. The critical difficulty in the advancement of treatment of this disease was the lack of the identification of a molecule(s) responsible for this disease. In 15 years of intense laboratory bench research Dr. Ahmed identified beta 4 integrin and alpha 6 integrin as the putative antigens. Hence tests can be developed to make early diagnosis. Simultaneously treatments that are target-specific can be developed. His observations have been duplicated by scientists in several countries globally.
Photograph of Dr. Alice Gottlieb, professor and Chairman of Dermatology at the Tufts Medical Center and Tufts University School of Medicine, presenting the Walter Lever Memorial Lecture Award to Dr. A. Razzaque Ahmed on May 18, 2016 in the Wolf auditorium at Tufts Medical Center.