

*Introduction:* The aspect ratio of an image describes the proportional relationship between its width and its height. As hair, and its contributing height, is lost in the hairline and frontal scalp, the aspect ratio of the face is altered, changing the picture of the human face as viewed by others. Hair transplants, when done correctly, allow patients to regain their facial aspect ratio and individuality. Split face photo show the changes in aspect ratio and facial appearance that can be made with the proper use of hair transplants **(we are including split face photo views as we continue to add patient photos in our 'Results' page on wolfhair.com).**

*Premise:* Adding lost hair to a patient's hairline and frontal scalp using hair transplants changes the facial aspect ratio. Split face before and after photos illustrate the positive change in facial aspect ratio.

*Substantiating Data:* 1. Side by side before and after photos will show changes in the facial aspect ratio of a person due to androgenetic alopecia. (J. Taylor) 2. Photos of subjects with total hairline and frontal scalp hair loss will show patients lose some of their individuality as they appear similar to each other due to the change in facial aspect ratio. (Willis/Chiklis) 3. Photos of objects and animals will show how a change in aspect ratio can drastically alter appearance. 4. Traditional side by side before and after photos and split face photos will be shown and contrasted. (Before, After, Split face photo) Many additional photos will be used in the PowerPoint presentation, these are a few samples.

*Discussion:* When viewed from the front, the human face, and its impression on the viewer, is shaped by the predictable anatomical position of its components. The eyes, ears, nose, and mouth vary little in their locations giving the viewer a predictable picture. If one or both eyes or ears, nose or mouth is absent or substantially changed the result is often considered grotesque. The position of the hairline, without hair loss, and its relationship to other anatomical features varies from person to person more than other features. With the loss of the hairline, due to androgenetic alopecia, the shape of the human face undergoes a progression of changes until, when the hairline is absent; the superior shape of the face is the flat skin in the shape of the curvature of the skull. The facial shape changes, becoming shorter and wider. Subjects who have totally lost their hairline lose a portion of their individuality as all subjects with no hairline and hair in the frontal aspect; have the same flat, rounded, superior face shape, that of no hair and the skin covering the rounded skull. As hair, and its contributing height, is lost in the hairline and frontal scalp, the aspect ratio of the face is changed, altering the picture of the human face as viewed by others. The face appears shorter and wider. The aspect ratio of an image describes the proportional relationship between its width and its height. For standard television, 4:3 has been in use since the invention of moving picture cameras and many computer monitors use this aspect ratio. The format of PowerPoint lectures at ISHRS meetings and international standard for HDTV is 16:9. In the past the 4:3 ratio was used for PowerPoint presentations. Changing to the 16:9 ratio improves the appearance of the slides. The ratio of width to height for the face changes as hair is lost. Hair transplants, when done correctly, allow patients to regain their facial aspect ratio and individuality. Traditionally, side by side before and after full facial photos has been used to show the improvement in appearance after hair transplantation. When the face is split and the halves of the face juxtaposed, the before and after changes become more dramatic due to this juxtaposition. Split face photos are difficult to compose. To appear proportional the angles of two blended images must be similar when the individual photos are taken. Split face photos can give prospective patients an idea of the acute changes in general appearance and specifically facial aspect ratio that properly performed hair transplants can achieve.