## The $21^{\text {st }}$ JAPAN SOCIETY ${ }^{11^{\text {n }} \text { to }} 1$ 13rd $^{\text {ren }}$ ON TENNIS SCIENCE

## The Analysis of the Game of Blind Tennis

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## Introduction

■ Blind Tennis was originally created as tennis for the blind by Miyoshi Takei in 1984 and the first tournament was held at the National Rehabilitation Center for the Disabled in 1990.

- Visually impaired versions of various sports are played on the ground and the floor. But Blind Tennis is played in the three dimensions over the net, using a special ball. The exterior of the ball is sponge with a rattling table tennis ball inside.

a short tennis racket or a tennis racket for junior players
(under 22 inches)


The ball emits a rattling sound. It contains a table tennis ball for the blind at a core. The table tennis ball has 4 small metal bearings inside.

## objective

We have compared the men's finals of Japan Blind Tennis Open with the game of top professional tennis players. We have analyzed some content of two games.
It is one way to clear the distinctive features of blind tennis.

## The content of analysis

－Blind Tennis 2008 Men＇s Finals
Miyoshi Takei VS Yasuji Segawa
ODilley Beach International 2008 Men＇s Finals
Kei Nishikiori VS Bleak James
$\star$ We compare 4 games，as blind tennis was played 4 games．
－分析項目
（1）time of play（2）time out of play
（3）maximum play time to get one point
（4）minimum play time to get one point（5）average play time to get one point
（6）the maximum number of rallies（7）the minimum number of rallies
（8）the average number of rallies
（9）the possibility of first services（10）the kinds of miss shot

## Result

## (1)Time of play (2)Time out of play

## Blind Tennis

The total time of the game 20 minutes 53 seconds
Time of play: 6 minuts 08 seconds
Time out of play: 14 minutes 45 seconds

## Normal Tennis

The total time of the game 18 minutes 17 seconds
Time of play: 4 minuts 09 seconds
Time out of play: 14 minutes 08 seconds

Compared these two,time of play takes longer to play blind tennis.

There is hardly any difference in the average number of rallies. The rule of blind tennis, in which players can hit a ball within 3 bounces, is thought to affect the result.

There is any other difference.

## (3) maximum play time

(4) minimum play time
(5) average play time


## (6)maximum rallies (7) minimum rallies (8)average rallies

## Blind Tennis

maximum, : 11
minimum,: 1
average: 3.1

## Normal Tennis

maximum: 11
minimum: 1
average: 4.0

Compared these two, the number of the rallies is almost the same.

There is not much difference in the average play time to get one point.

## (9)The possibilities of first services



## (10The kinds of miss shot



- Compared these two, there are marked differences in swing, not up, and aces.


## result

Compared blind tennis with normal tennis, there is a marked difference in the playing time. The speed of the ball affects the result, but most importantly, the number of the bounces thought to be the main cause. (Totally blind players are allowed three bounces.

And we can find differences in the kinds of miss shots.

But there are a lot of similarities between blind tennis and normal tennis in the other points.

The present regulations and rules are sufficient for the visually impaired to play tennis.
As a result, it can be said that visually impaired people can enjoy tennis using this form.

